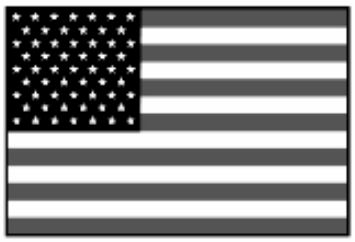
U.S. Department
of Transportation
**Federal Aviation
Administration**

AFS-600
Regulatory Support Division

ADVISORY CIRCULAR
43–16A

AVIATION MAINTENANCE ALERTS



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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20590

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provide a common communication channel through which the aviation community can economically interchange service experience and thereby cooperate in the improvement of aeronautical product durability, reliability, and safety. This publication is prepared from information submitted by those who operate and maintain civil aeronautical products. The contents include items that have been reported as significant, but which have not been evaluated fully by the time the material went to press. As additional facts such as cause and corrective action are identified, the data will be published in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported via Malfunction or Defect Reports. Your comments and suggestions for improvement are always welcome. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

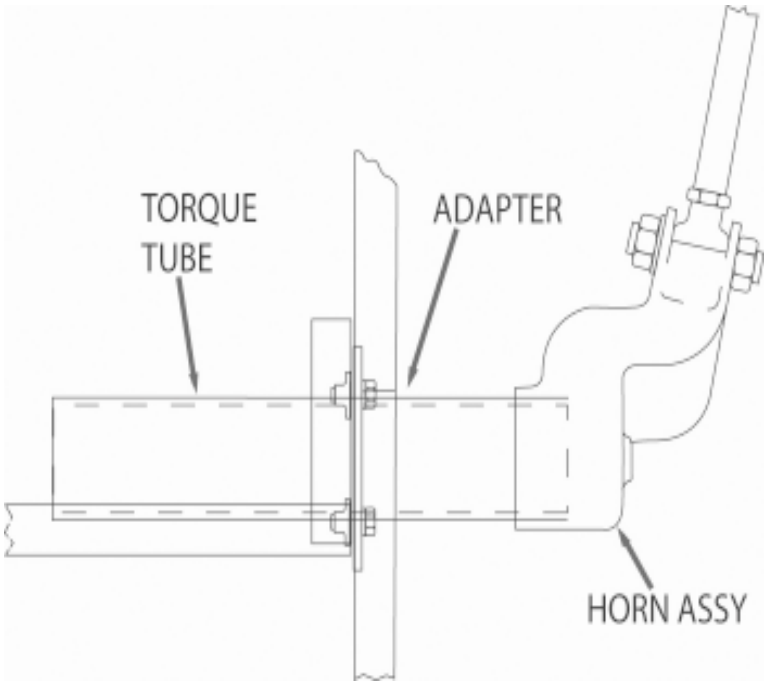
AIRPLANES

BEECH

Beech; All Model 1900 Series; Airliner; Elevator Torque Tube Assembly; ATA 2730

An FAA inspector from the Ft. Lauderdale, Florida, Flight Standards District Office (FSDO) reported the elevator torque tube assembly (P/Ns 101-610019-5 left and 101-610019-6 right) on the Beech 1900 aircraft failed.

Two operators found movement in the area of the torque tube to the tube adapter and in the horn assembly (P/N 101-610019-7). (Refer to the illustration.)



The submitter recommend that all operators of Beech 1900 aircraft conduct routine inspections for movement in the area of the torque tube to the tube adapter and the horn assembly.

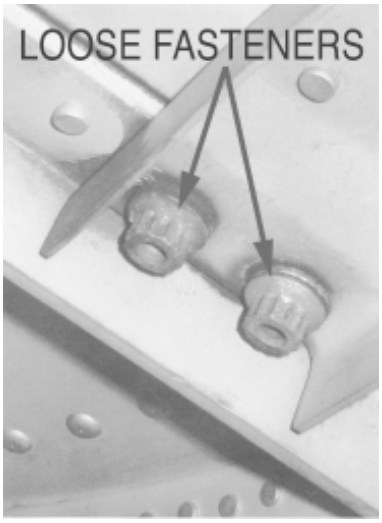
The FAA Service Difficulty Reporting Program data base revealed 17 similar reports for the period of January 1, 1995, to January 28, 2003. According to the reported information, movement in the area of the torque tube to the tube adapter and the horn assembly are cause by loose rivets.

Part total time-not reported.

Beech; All Model 1900 Series; Airliner; Vertical Stabilizer; ATA 5530

The technician was inspecting the tail section and discovered there was a problem with the vertical stabilizer.

The upper four attach bolts (P/N EWB 22-5-14) for the vertical stabilizer forward spar were loose. All four bolts were below minimum torque specification. (Refer to the illustration.)



The FAA Service Difficulty Reporting Program data base revealed 10 similar reports of loose vertical stabilizer forward spar attach bolts.

Part total time-20,267 hours.

BOEING

Boeing; Model 737 Series; Hamilton Sundstrand; Auxiliary Power System (APU); ATA 4930

The San Diego Flight Standards District Office (AWP-09) processed two Malfunction or Defect Reports which cited failure of the Hamilton Sundstrand APU (P/N APS 2000) used on Boeing 737 series aircraft.

The submitter stated the APU went into auto shutdown with a large amount of fuel coming out of the APU area. Further investigation revealed that one of the 14 fuel tubes on the main fuel manifold (P/N 4950084) had broken between the flexible fire sleeve and the fuel injector B-nut.

Part total time unknown.

CESSNA

CESSNA SINGLE-ENGINE THROTTLE CONTROLS

This article was provided by the FAA Aircraft Certification Office (ACO) Airframe, Propulsion and Services (ACE-118W) located in Wichita, Kansas.

> The FAA has received a report, from an international authority, of a single-engine Cessna airplane that had the throttle control separate from the rod end that is attached to the carburetor. This airplane, like many others, but not all single-engine airplanes manufactured by Cessna, was equipped with a mechanism that enables the engine to automatically revert to full power when the throttle becomes disconnected from the fuel metering unit.

The FAA previously issued Airworthiness Directive (AD) 86-24-07 on the single-engine controls installation applicable to Cessna airplanes as well as Advisory Circular (AC) 20-143, Installation, Inspection, and Maintenance of Controls for General Aviation Reciprocating Aircraft Engines. The FAA also previously revised Title 14 of the Code of Federal Regulations (14 CFR) part 23, sections 23.1143(g) and 23.1147(b) to address the need for continued safe flight and landing in the event of a control separation at the engine fuel-metering device. These current rules are not applicable to older in service airplanes.

The manufacturer's service information, the FAA's ACs, and ADs are the methods used to alert field maintenance personnel of the importance of providing adequate maintenance on in-service aircraft. The FAA continues to evaluate the reliability of engine-control installations applicable to small airplanes. The number of adverse reports applicable to these problems have reduced since the issuance of enhanced maintenance instructions, ACs, and ADs applicable to the controls installed on reciprocating-engine airplanes.

Continued vigilance on the part of those individuals involved in inspection and maintenance must be maintained in order to keep the number of adverse reports associated with these components to a minimum. It should be noted that while some of the engines will revert to full power/mixture to enable continued safe flight and landing, many of the airplanes previously and currently produced primarily rely on proper maintenance of engine controls to ensure an adequate level of safety.

Cessna; Models 177RG, F177RG, 210, P210; Landing Gear Hydraulic Hose Failure; ATA 3230

This article was provided by the FAA Aircraft Certification Office (ACO) Airframe, Propulsion and Services (ACE-118W) located in Wichita, Kansas.

Failing Parts: S2178-4 series hydraulic hoses used in the landing gear system.

Service Difficulty Reports (SDRs) are being received of landing gear hydraulic hose (P/N S2178-4 series) failures. In several cases, the failure resulted in a loss of hydraulic fluid, inability to extend the landing gear, and a gear-up landing.

An example of this is NTSB Report DEN01LA119 describing a Model 177RG. On July 1, 2001, the aircraft landed nose gear down/main gear up due to a nose gear actuator hose failure. After the accident the failed hose was identified as an S2178-4 series hose.

Cessna provided a Service Bulletin SEB 92-8 dated April 17, 1992, which mandated replacement of S2178-4 series hydraulic hoses with S2888 series hoses for certain Cessna Models 177RG, F177RG, 210, and P210.

Since an operator is not required to incorporate an SEB to maintain an airworthiness certificate, it appears that some operators (like the 177RG example) are not implementing SEB 92-8. To avoid in-flight loss of hydraulics due to S2178-4 hose failures, all owners, operators, and maintenance personal should verify Cessna SEB 92-8 has been incorporated on aircraft they fly and maintain. If the SEB has not been completed, it is recommended that it be complied with immediately.

Cessna; All Model 400 Series; Wing Spar Attach Fittings Corrosion; ATA 5740

This article was provided by the FAA Aircraft Certification Office (ACO) Airframe, Propulsion and Services (ACE-118W) located in Wichita, Kansas.

While conducting an annual inspection on a Cessna Model 414A, the technician discovered severe corrosion on both wings upper aft spar attachment fittings. This is the second aircraft in a few months that displayed corrosion on both wings upper aft spar attachment fittings.

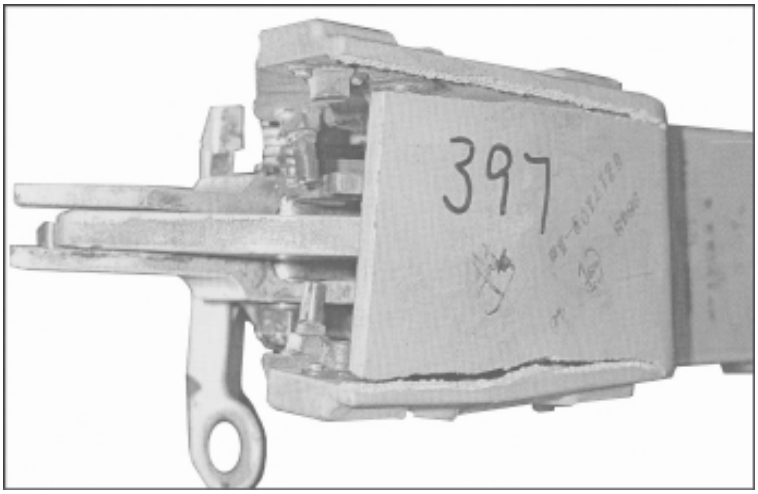
Cessna has revised all Model 400 Series Supplemental Inspection Documents (SIDs) contained in the aircraft maintenance manual. The SIDs require a visual inspection to detect corrosion on the forward and aft wing upper attachment fittings. If cracks or corrosion are detected, the SIDs require the replacement of the wing attach fitting.

The FAA recommends that all owners and operators of the affected models comply with the revised SIDs and visually inspect the forward and aft upper attachment.

Cessna; Model 650; Citation III; Landing Gear System; ATA 3230

During landing gear retraction, the pilot heard a loud “bang,” and the gear unlock annunciator remained on. He placed the landing gear handle in the “down” position, confirmed three green gear-safe annunciators were on, and made a safe landing.

The technician discovered a broken ground wire at pin F of the main landing gear uplock microswitch (P/N H11-1307-1) connector. The broken wire caused the left main gear uplock to close and lock before the landing gear was fully retracted. This action resulted in the uplock housing assembly and uplock mechanism to be smashed by the retracting landing gear. He suspects the wire broke due to age. (Refer to the illustration.)



The submitter recommends that all operators of Cessna 650 Citation aircraft inspect the main and nose landing gear uplock microswitch connectors.

Part total time-7,556 hours.

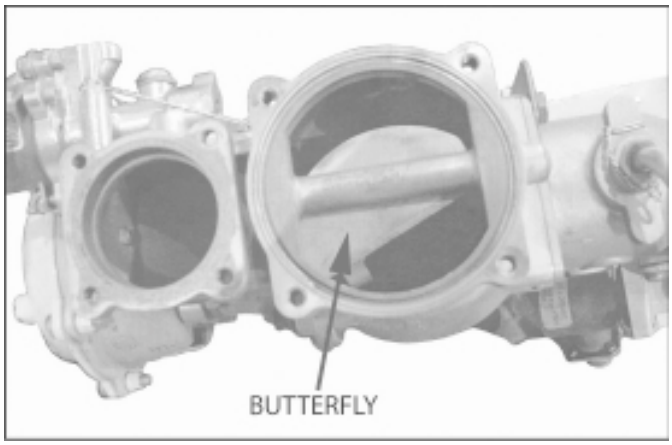
LEARJET

Learjet; Model 35A; Pneumatic Distribution System; ATA 3610

A recently processed Malfunction or Defect Report cited failure of the bleed air shutoff and pressure regulator control valve (P/N 3214478-2).

The submitter stated that the low-pressure butterfly portion of the control valve came apart. An investigation revealed that the hinge pin apparently failed. (Refer to the illustration.)

Part total time unknown.



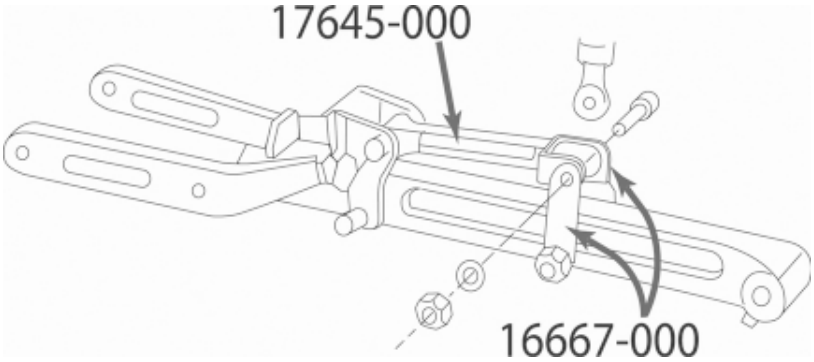
PIPER

Piper; Model PA 23-160; Apache; Nose Landing Gear System; ATA 3230

During landing gear retraction, the pilot heard a “bang.” There was no nose gear indication on gear extension. Upon landing, the nose landing gear down-and-locked green light appeared, and he made a safe landing. (Refer to the illustration.)

An investigation revealed the hydraulic actuator connector links (P/N 16667-000) broke in half which also ripped open the bolt holes for the nose landing gear locking link (P/N 17645-000).

Part total time-4,299 hours.



Piper; Model PA 31-350; Chieftain; Landing Gear System; ATA 3230

The pilot reported the gear would not extend. He made a gear-up landing, and the passengers and pilot exited the aircraft.

After landing the aircraft, the pilot made many attempts to troubleshoot the system; however, the gear failed to extend.

An investigation determined that the end of the gear selector cable (P/N 55416-02) pin had been installed improperly, which allowed it to separate from the hydraulic powerpack actuator arm.

According to the submitter, the cable end is located on the powerpack in an extremely close quarter, which makes it difficult for pin installation.

RAYTHEON

Raytheon; Model HS 125-700; Hawker Siddeley; Fuel Boost Pump Conduit; ATA 2822

A Malfunction or Defect Report (M or D) was received citing corrosion as the causal factor for pinholes in the fuel boost pump wiring conduit (P/N 25PF295-139A).

According to the submitter, the pinholes allowed fuel to leak directly into the fuel boost pump wiring. Further investigation revealed the conduit was painted on the outside, but the corrosion started from the inside.

The submitter suggests immediate inspection of all conduits on similar make and model aircraft.

Part total time unknown.

POWERPLANTS AND PROPELLERS

MC CAULEY

McCauley; Propeller Spinner Failure; ATA 6113

The FAA Atlanta Aircraft Certification Office (ACE-115A) submitted the following article.

> Recently, a Cessna 210 experienced the loss of the propeller spinner. This particular airplane had a Teledyne Continental Motors Model IO-550-L engine that was installed via an STC. The propeller and spinner assemblies were manufactured by McCauley and were part of the original installation. Fortunately, the airplane was able to divert to an alternate airport. There were no injuries, no damage to the aircraft, and only minor damage to the propeller.
>
> An incident investigation revealed that the backing plate cracked and allowed the spinner to separate and depart the airplane.

Numerous avenues of investigation were pursued in an effort to find the cause of the mishap. The FAA Service Difficulty Reporting Program data base was accessed, the holder of the STC provided data, an Airworthiness Concern Sheet was published, the responses were studied, and Cessna provided data. The result of all the investigations revealed there are no other known or recent problems of this type. There was mention of what appears to be a similar problem, but that was decades ago.

It is believed that this was a maintenance error as opposed to a design or production problem. Further, although the incident occurred on a Cessna with a McCauley propeller, it could happen on any airplane with any propeller.

Maintenance personnel are reminded to pay careful attention to the installation instructions when the propeller and especially the backing plate, spinner, and bulkheads are installed. Inspections should be conducted at the times specified by the manufacturer of the product and/or the airframe manufacturer or, at a minimum, during the annual inspection.

AIR NOTES

ELECTRONIC VERSION OF MALFUNCTION OR DEFECT REPORT

One of the recent improvements to the AFS-600 Internet web site is the inclusion of FAA Form 8010-4, Malfunction or Defect Report. This web site is still under construction and further changes will be made; however, the site is now active, usable, and contains a great deal of information.

Various electronic versions of this form have been used in the past; however, this new electronic version is more user friendly and replaces all other versions. You can complete the form online and submit the information electronically. The form is used for all aircraft except certificated air carriers who are provided a different electronic form. The Internet address is:

http://av-info.faa.gov/isdr/

When the page opens, select “M or D Submission Form” and, when complete, use the “Add Service Difficulty Report” button at the top left to send the form. Many of you have inquired about this service. It is now available, and we encourage everyone to use this format when submitting aviation, service-related information.

SERVICE DIFFICULTY REPORTING PROGRAM

The objective of the Service Difficulty Reporting (SDR) Program is to achieve prompt and appropriate correction of conditions adversely affecting continued airworthiness of aeronautical products fleet wide. The SDR program is an exchange of information and a method of communication between the FAA and the aviation community concerning inservice problems.

A report is filed whenever a system, component, or part of an aircraft, powerplant, propeller, or appliance fails to function in a normal or usual manner. In addition, if a system, component, or part of an aircraft, powerplant, propeller, or appliance has a flaw or imperfection which impairs, or which may impair its future function, it is considered defective and should be reported under the program.

These reports are known by a variety of names: Service Difficulty Reports (SDR), Malfunction or Defect Reports (M or D) and Maintenance Difficulty Reports (MDR).

The collection, collation, analysis of data, and the rapid dissemination of mechanical discrepancies, alerts, and trend information to the appropriate segments of the FAA and the aviation community provides an effective and economical method of ensuring future aviation safety.

The FAA analyzes SDR data for safety implications and reviews the data to identify possible trends that may not be apparent regionally or to individual operators. As a result of this review, the FAA may disseminate safety information to a particular section of the aviation community. The FAA also may adopt new regulations or issue airworthiness directives (AD's) to address a specific problem.

The primary source of SDR's are certificate holders operating under Parts 121, 125, 135, 145 of the Federal Aviation Regulations, and the general aviation community which voluntarily submit records. FAA Aviation Safety Inspectors may also report service difficulty information when they conduct routine aircraft and maintenance surveillance as well as accident and incident investigations.

The SDR data base contains records dating back to 1974. Reports may be submitted on the Internet through an active data entry form or on hard copy. The electronic data entry form is in the AFS-600 Aviation Information web site under the heading SDR Main Menu. The URL is: <http://av-info.faa.gov>

A public search/query tool is also available on this same web site. This tool has provisions for printing reports or downloading data.

At the current time we are receiving approximately 45,000 records per year.

Point of contact is:
John Jackson
Service Difficulty Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125

Telephone: (405) 954-6486
9-AMC-SDR-ProgMgr@mmacmail.jccbi.gov

IF YOU WANT TO CONTACT US

We welcome your comments, suggestions, and questions. You may use any of the following means of communication to submit reports concerning aviation-related occurrences.

Editor: Isaac Williams (405) 954-6488
FAX: (405) 954-4570 or (405) 954-4655

Mailing address: FAA, ATTN: AFS-620 ALERTS, P.O. Box 25082,
Oklahoma City, OK 73125-5029

You can access current and back issues of this publication from the internet at: http://afs600.faa.gov

When the page opens, select "AFS-640" and then "Alerts" from the drop-down menu. The monthly issues of the Alerts are available back to July 1996, with the most recent edition appearing first.

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports submitted between January 24, 2003, and February 20, 2003, which have been entered into the FAA Service Difficulty Reporting (SDR) System data base. This is not an all inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

FAA
Aviation Data Systems Branch, AFS-620
PO Box 25082
Oklahoma City, OK 73125

These reports contain raw data that has not been edited. If you require further detail please contact AFS-620 at the address above.

FEDERAL AVIATION ADMINISTRATION
Service Difficulty Report Data

Sorted by Aircraft Make and Model then Engine Make and Model. This Report Derives from Unverified Information Submitted By the Aviation Community without FAA review for Accuracy.

ACFT MAKE	ENG MAKE	COMP MAKE	PART NAME	PART CONDITION	DIFF-DATE	T TIME
ACFT MODEL	ENG MODEL	COMP MODEL	PART NUMBER	PART LOCATION	OPER CTRL NO.	TSO
REMARKS						
			PROPELLER	MISREPAIRED	11/13/2002	
			M76AM	LEADING EDGE	2003013100001	

(CAN) PROPELLER WITH NO HISTORY SENT IN FOR OVERHAUL. - DURING LIQUID PENETRANT INSPECTION, FOUND SUSPICIOUS WELDING WITH EDDY CURRENT CONDUCTIVITY PROBE AS WELDED AREA MATCHED GOOD AREA. KELLERS ETCH SHOWED DISCOLORATION AND CHROMIC ACID ANODIZING CONFIRMED WELDING HAD TAKEN PLACE. AS MOST PROP SHOPS DO NOT HAVE ANODIZE FACILITIES, THIS IS A TOUGH IMPROPER REPAIR TO LOCATE.

			BEARING	DENTED	12/10/2002	
			A5270	PROP ASSY	2003020100038	

(CAN) AFTER DISASSEMBLY OF THE PROPELLER IT WAS NOTED THAT ALL THREE BLADE THRUST BEARINGS WERE BADLY DENTED, BEYOND REUSE. THE BEARINGS, LUBRICANTS, AND BALLS WERE ALL REPLACED AND THE PROPELLER WAS ASSEMBLED.

			NUT	CRACKED	01/12/2003	
				PROPELLER	2003020500066	850

DURING ROUTINE OVERHAUL OF THIS PROPELLER FOUND NR 2 THREAD IN THE NR 2 HUB SOCKET CRACKED. VISUAL/MAGNIFYING GLASS AND CONFIRMED WITH EDDIE CURRENT AND DYE-CHECK NDT. FOUND THE ASSOCIATED BLADE RETENTION NUT CRACKED ON THE NR 2 THREAD AS WELL VIA THE SAME MEANS OF INSPECTION. THESE WERE JUST THE BEGINNING OF A MINUTE CRACK AND HAD NOT PROGRESSED TO THE POINT OF THE PROPELLER LEAKING RED DYE OIL YET. COULD HAVE CAUSED A COMPLETE BLADE FAILURE OF THE BLADE LEAVING THE HUB. PHOTO ON FILE.

	CONT	SLICK	DISTRIBUTOR	DAMAGED	01/22/2003	501
	IO520BB			MAGNETO	2003021900030	

MAGNETO REMOVED FROM ENGINE FOR 500 HOUR INSPECTION IAW THE MM. DURING INSPECTION FOUND THAT THE CARBON BRUSH WAS RUBBING AND CAUSING CARBON DUST. HAVE MFG LOOK AT REDUCING THE TOLERANCES BETWEEN THE DISTRIBUTOR BLOCK AND THE GEAR POST WHERE THEY FIT TOGETHER TO HELP PREVENT GEAR FROM ROCKING BACK AND FORTH.

	CONT		GEAR	WRONG PART	09/27/2002	
	W6706A		3979	CAMSHAFT	2003021500006	

ENGINE STOPPED RUNNING DUE TO A FAILED INTERMEDIATE CAM DRIVE GEAR. UPON DISASSEMBLY IT WAS FOUND THAT A PN 3979 GEAR FROM A TANK ENGINE HAD BEEN SUBSTITUTED FOR THE PN A3062. AIRCRAFT ENGINE GEAR WHICH SHOULD HAVE BEEN USED. TANK IGNITION DRIVE GEARS HAD BEEN USED AS WELL IN PLACE OF THEIR AIRCRAFT COUNTERPARTS. THE TEETH HAD SHEARED FROM THE INTERMEDIATE CAM DRIVE GEAR CAUSING THE CAM TO STOP TURNING AND ENGINE QUIT RUNNING.

	GARRTT	GARRTT	DRIVE SHAFT	STRIPPED	01/24/2003	
	TFE73122B			FUEL PUMP	2003020500062	

LT ENGINE FLAME OUT CLIMBING THROUGH 7,500 FT MSL AT 250 KTS. NO ABNORMAL INDICATIONS PRIOR. UNABLE TO RE-LIGHT. UPON REMOVAL OF FUEL PUMP FROM ENGINE, FOUND SHAFT SPLINES SEPARATED FROM MAIN PUMP SHAFT. REPLACED PUMP WITH OVERHAULED UNIT.

	GE	BOLT	MISSING	02/01/2003	
	CF6*	R584P205	BEARING	2003021900031	

AIRCRAFT OPERATOR REPORTED A TOTAL LOSS OF OIL PRESSURE AND QUANTITY 20 MINUTES AFTER TAKE OFF FROM LAX. THIS RESULTED IN A IFSD AND AN ATB. INVESTIGATION AT THE ENGINE REPAIR STATION REVEALED THAT ONE OF THE TWELVE RETAINING BOLTS FOR THE NR 7 BEARING WAS MISSING. THE BOLT WAS FOUND IN THE BEARING SCAVENGE LINE. THE BOLT HAD BLOCKED THE PIPE AND CAUSED THE ENGINE TO PUMP ALL OF THE OIL OVERBOARD.

LYC	CRANKSHAFT	CORRODED	01/24/2003	
O320D2J	LW17031	ENGINE	2003021400107	

(CAN) CORROSION FOUND UNDERNEATH URETHABOND COATING APPLIED IN ACCORDANCE WITH SB 505B, SB 530A, &

LYC	CRANKSHAFT	CORRODED	01/13/2003	
O320H2AD	LW15916	ENGINE	2003021400028	

(CAN) CORROSION FOUND UNDERNEATH URETHABOND COATING APPLIED IN ACCORDANCE WITH SB 505B, SB 530A AND AD 998-02-08. URETHABOND COATING IS APPLIED TO PREVENT CORROSION, BUT AS IN MOST CASES, IT DID NOT.

AIRTRC	PWA	PUMP	LEAKING	12/06/2002	
AT802	PT6A67	AN4101	ENG DRIVEN FUEL	2003020100020	

(CAN) A FUEL LEAK WAS DETECTED DURING ANNUAL INSPECTION IN THE PLENUM CHAMBER AREA. IT WAS TRACED TO THE ENGINE DRIVEN FUEL PUMP.

AMD	GE	TRANSMITTER	FALSE INDICATION	12/27/2002	
FALCON20	CF7002D2	11346AA	RT ENGINE OIL	2003020400131	

(CAN) DURING TAKE-OFF ROLE THE PILOT IN COMMAND NOTICED OIL PRESSURE FLUCTUATION OF THE RT ENGINE. THE PILOT IN COMMAND INITIATED REJECTED TAKE-OFF. AT THIS TIME, THE FLIGHT CREW ADVISED ATC AND RETURNED TO THE MAINTENANCE FACILITY. OUR CONTRACTED AMO HAS DETERMINED THAT THE OIL PRESSURE TRANSMITTER IDENTIFIED AS AT FAULT, THEREFORE GIVING A FALSE OIL PRESSURE INDICATION TO THE FLIGHT CREW. THE OIL PRES SURE TRANSMITTER WAS REPLACED WITH A SERVICEABLE UNIT. THE AIRCRAFT WAS GROUND RUN SATISFACTORILY AND WAS RETURNED INTO SERVICE TO RESUME OPERATIONS.

AMD	GARRTT		LINE	CRACKED	12/09/2002	1237
FALCON900	TFE7315BR		30723742	2 ENGINE	2003020500203	

DURING CRUISE FLIGHT, NR 2 OIL LIGHT ON MASTER WARNING PANEL CAME ON. POWER LEVER WAS REDUCED TO IDLE, OIL PRESSURE INDICATION CONTINUED TO FALL TO LESS THAN 25 PSI, THIS TOOK APPROXIMATELY 15-20 SECONDS. CHECKLIST WAS CALLED, NR 2 ENGINE WAS SHUT DOWN. CREW DIVERTED FOR LONGER RUNWAY AND MAINTENANCE SERVICES. NO OTHER ANOMALIES WERE ENCOUNTERED AND EMERGENCY WAS NOT DECLARED. UNEVENTFUL LANDING WAS MADE. AIRCRAFT WAS TAXIED TO MAINTENANCE BASE. OIL WAS FOUND DRIPPING OUT OF NR 2 ENGINE COWLING. FURTHER EXAMINATIONS OF ENGINE DISCOVERED CRACK ON OIL PRESSURE SUPPLY LINE TO THE AFT BEARING AREA. THE PART WAS REPLACED AND RUN AND LEAK CHECKS COMPLIED WITH. NO LEAKS

AMTR	LYC		GOVERNOR	MALFUNCTIONED	02/17/2003	673
RV8	O360A1A		B210776A	PROPELLER	2003021900024	

PROPELLER WOULD CYCLE NORMALLY DURING RUN UP. AFTER TAKE OFF THE PROP WOULD BECOME UNCONTROLLABLE. RMP ONLY CONTROLLABLE BY THROTTLE, NOT PROPELLER CONTROL. REMOVAL AND DISASSEMBLY OF PROP GOVERNOR REVEALED THAT ALLEN SCREW HAD BACKED OUT OF REAR OF UNIT AND WAS CAUGHT BY INTERNAL GASKET SCREEN BETWEEN UNIT AND ACCESSORY HOUSING. THIS WAS A FACTORY NEW UNIT WITH 673 HRS. APPEARS ALLEN SCREW WAS NOT PROPERLY TIGHTENED AT FACTORY. REINSTALLED WITH LOCK TIGHT AND TIGHTENED SECURELY. HAD THERE NOT BEEN GASKET SCREEN IN PLACE, ENGINE DAMAGE OR STOPPAGE

BEECH	PWA	SKIN	CRACKED	01/27/2003	
100BEECH	PT6A28	9913000011	RT AILERON	2003021400100	

(CAN) A 1. 5 CENTIMETER CRACK FOUND RADIATING FROM A RIVET ON SECOND RIB FROM INBOARD EDGE AND LAST RIVET HOLE BEFORE THE TRAILING EDGE. ANOTHER . 5 CENTIMETER CRACK IN SKIN FOUND RADIATING FROM THE SECOND RIVET FROM THE TRAILING EDGE ON THE THIRD RIB. THE CRACKS WERE DIFFICULT TO SEE BUT WERE INDICATED BY THE PAINT. THE SKIN HAD BEEN REPLACED AND HAD 870. 2 HOURS SINCE NEW. BEECHCRAFT IS BEEN CONTACTED TO DISCUSS ANY WARRANTY OPTIONS.

BEECH	PWA	SEAL RING	STUCK	01/28/2003	
1900C	PT6A65B	3022852	R GEARBOX	2003021400103	

(CAN) AFTER ENGINE START, THE TORQUE READING INDICATED APPROX 3000 FT/LBS. POWER INCREASES OR DECREASES HAD LITTLE EFFECT. TROUBLESHOOTING WAS PERFORMED. A TORQUE INDICATION SYSTEM CALIBRATION TESTER WAS CONNECTED AND INDICATION WAS NORMAL. A TEST GAUGE WAS CONNECTED TO THE TORQUEMETER OIL LINE AND CONFIRMED A HIGH READING USING THE STARTER TO SPOOL. A SERVICE REP SUGGESTED THAT THE TORQUEMETER PISTON INSIDE THE RGB MAY BE HUNG UP. THIS CAN BE CAUSED BY THE TEFLON RINGS ON THE METER PISTON STICKING BEFORE THEY ARE WORN IN. SUGGESTED TO BLOW LOW PRESSURE AIR INTO THE OIL LINE IN THE RGB WHILE ROCKING THE PROP BACK AND FORTH. THIS PROCEDURE RECTIFIED THE

BEECH CONT STRUCTURE CRACKED 01/03/2003
35BEECH E18511 35405130 STABILIZER 2003020400105
CRACK FOUND IN LOWER RT ATTACH BOLT HOLE FROM HOLE CENTER AT THE 2 O'CLOCK POSITION. FOUND DURING INSPECTION FOR AD. CRACK LENGTH . 250 INCH.
BEECH BEECH TURNBUCKLE BROKEN 01/15/2003 4315
36BEECH 3652400019 CONTROL CABLE 2003020500225
AILERON CABLE TURNBUCKLE FORWARD OF AFT SPAR BROKEN. SAFETY WIRE HOLDING CABLE TOGETHER, FOUND DURING ANNUAL INSPECTION. CABLE HAD BEEN CONTACTING AFT HEAT DUCT. APPEARS TO HAVE INTERNAL CORROSION FROM CONTACT WITH WIRE IN HEAT DUCT. FITTING SHOW NO SIGN OF WEAR OR EXTERNAL CORROSION.
BEECH CONT ENCODER OUT OF ADJUST 01/10/2003
58 IO520* COCKPIT 2003020500065
ENCODER MISSING HIGH ALTITUDE ADJUSTMENT OUT OF THE FACTORY. THE MM REQUIRES YOU TO CALIBRATE THE ENCODER USING HIGH ALTITUDE AND LOW ALTITUDE ADJUSTMENT POTS.
BEECH CONT BEARING LOOSE 01/15/2003 189
58P TSIO520* 103915686 DISTRIBUTOR BLK 2003020400228
DURING CRUISE POWER SETTING IN FLIGHT. RT ENGINE RPM FLUX 100-200 RPM AND MANIFOLD PRESSURE FLUX 1 INCH TO 2 INCH. DURING GROUND RUN TO TROUBLESHOOT SYSTEM ENGINE RPM WOULD SUDDENLY DROP 200-400 RPM. AT CRUISE SETTING. PERFORMED MAGNETO CHECK. LT MAG FAILED. BEARING IN DISTRIBUTOR BLOCK SPINNING, POSSIBLE DATE CODE ON BLOCK 01/09.
BEECH PWA SWITCH BROKEN 01/25/2003
65A90 PT6A20 2MD31AX287 MLG SELECTOR 2003021400029
(CAN) ON APPROACH , THE LANDING GEAR WAS SELECTED DOWN, BUT THE GEAR DID NOT EXTEND. FIVE ATTEMPTS WERE MADE TO EXTEND THE GEAR NORMALLY AND NO JOY. THE GEAR WAS EXTENDED USING THE EMERGENCY EXTENSION SYSTEM. THE PILOT NOTED THAT IT WAS DIFFICULT TO EXTEND. THE EMERGENCY SERVICES WERE ACTIVATED AND A LOWFLY PAST WAS CARRIED OUT TO ENSURE THE GEAR WAS DOWN. THE AIRCRAFT LANDED SUCCESSFULLY. ON INVESTIGATION, ONE OF THE SWITCHES WAS FOUND TO BE FAULTY IN THE LANDING GEAR SELECTOR ASSY. THE GEAR ALSO EXTENDED NORMALLY WHEN USING THE EMERGENCY EXTENSION. THE OAT WAS
BEECH PWA BLOWER FAILED 12/31/2002
99 PT6A28 115384007 COCKPIT 2003020400146
(CAN) AIRCRAFT WAS TAXING FROM TERMINAL TO RUNWAY WHEN SMOKE STARTED FILLING COCKPIT. ELECTRICAL COMPONENTS WERE TURNED OFF AND AIRCRAFT RETURNED TO TERMINAL. MAINTENANCE WAS CONTACTED AND FORWARD VENT BLOWER WAS REPLACED. GROUND CHECKED SERVICEABLE.
BEECH PWA LINE BLOCKED 11/28/2002
A100 PT6A28 RT ENG P3 SUPPLY 2003020400135
(CAN) AFTER TAKEOFF IN THE CLIMB THROUGH 15,000 FT THE RT ENGINE EXPERIENCED THREE MAJOR SURGES WITH FLUCTUATIONS OF TORQUE, NG, ITT, AND FUEL FLOW ALONG WITH FLAMES SHOOTING FROM THE ENGINE EXHAUST. AFTER EXTENSIVE TROUBLESHOOTING THE ENGINE WAS DEEMED TO BE INTERNALLY AT FAULT. THE ENGINE WAS REPLACED AND THE AIRCRAFT RETURNED BACK TO SERVICE. THE ENGINEER MOVED WAS FOUND TO HAVE A PARTIAL BLOCKAGE OF THE P3 SUPPLY TUBE TO THE BLEED OFF VALVE. THE BLOCKAGE WAS CLEARED AND THE ENGINE RETESTED SATISFACTORY AT THE REPAIR FACILITY.
BEECH PWA LINE FROZEN 01/13/2003
A100 PT6A28 OUTFLOW VALVE 2003020400147
(CAN) OUTFLOW VALVE SUCTION LINE WAS FROZEN CAUSING AIRCRAFT TO PRESSURIZE ON THE GROUND. COULD NOT BE CONTROLLED BY CONTROLLER. LINE WAS BLOWN OUT AND SYSTEM CHECKED SERVICEABLE AS PER
BEECH PWA DOWNLOCK FAILED 01/27/2003
A100 PT6A28 1003810061 LT MLG 2003021400105
(CAN) WHILE ON APPROACH THE PILOT SELECTED GEAR DOWN AND THE LT GEAR INDICATION DID NOT ILLUMINATE. THE GEAR WAS CYCLED WITH NO CHANGE. THE AIRCRAFT LANDED WITHOUT INCIDENT. MAINTENANCE REPLACED THE LEFT GEAR DOWNLOCK INDICATOR SWITCH AND SYSTEM WAS TESTED SERVICEABLE
BEECH PWA SPLINE CRACKED 02/04/2003
A100 PT6A28 115610010125 ELEVATORS 2003021400113
(CAN) UPON A RECENT INSPECTION REQUESTED BY THE REGIONAL PMI IT WAS DISCOVERED THAT THE TRAILING EDGE SPLINES ON BOTH PORT AND STARBOARD ELEVATORS WERE CRACKED. THE ELEVATOR TRAILING EDGE SPLINES ARE PRESENTLY BEING CLOSELY MONITORED AND WILL BE REPLACED IN THE NEAR FUTURE.
BEECH PWA COAX UNSERVICEABLE 01/29/2003
B200 PT6A42 RG223 INSTRUMENTS 2003021400099
(CAN) DURING AIRCRAFT IMPORTATION INSPECTION INTO CANADA, AVIONICS CHECKS NOTED WEAK NAVIGATION, COMMS, G/S RECEPTION. TROUBLESHOOTING FOUND THAT THE COAXIAL CABLE INSTALLED FOR THE ENTIRE AIRCRAFT, NAVIGATION, AND COMMUNICATIONS SYSTEMS HAD A MANUFACTURING DEFECT FROM DAY ONE OF INSTALLATION. THE INNER CORE OF TO CABLE DOES NOT RUN IN THE CENTER OF THE INSULATOR. THE CORE TOUCHES THE SHIELDING IN MULTIPLE LOCATIONS OF THE CABLE CAUSING SHORTS IN THE CABLE.
BEECH PWA WINDSHIELD FAILED 12/27/2002 614
B300 PT6A60A 1013840227 COCKPIT 2003020600107
A/C WAS ENROUTE AT FL260, WINDSHIELD ANTI-ICE WAS SELECTED ON AND WAS ON FOUR 1 1/2 HOURS WHEN A LOUD CRACK WAS HEARD AND THE PILOTS WINDSHIELD SHATTERED THE INNER PANE INTO PEA SIZED PIECES. CREW FOLLOWED AIRCRAFT ABNORMAL PROCEDURES AND DESCENDED BELOW 25,000 FEET AND KEEP CABIN PSI BETWEEN 2 AND 4. 6. OAT AT TIME WAS -35C. AIRCRAFT WAS FLOWN BACK TO HOME BASE.
BEECH PWA WINDSHIELD FAILED 02/02/2000 1481
B300 PT6A60A 10138402517 COCKPIT 2003020600108
A/C WAS ENROUTE TO TEB AT FL290, WINDSHIELD ANTI-ICE WAS SELECTED FOR 1HOUR WHEN A LOUD CRACK WAS HEARD AND THE PILOTS WINDSHIELD SHATTERED THE INNER PANE INTO PEA SIZED PIECES. CREW FOLLOWED AIRCRAFT ABNORMAL PROCEDURES AND DESCENDED BELOW25,000 FEET AND KEEP CABIN PSI BETWEEN 2 AND 4 PSI. TEMP AT ALTITUDE WAS -39C. AIRCRAFT WAS FLOWN TO TEB AND REPAIRED
BEECH PWA CONTROL FAILED 01/07/2003
C90 PT6* NAS302665170 ELEVATOR 2003020400231
ELEVATOR TRIM CABLE FAILED IN FLIGHT WITH NO INCIDENT AT STATION 216. CABLE BROKE AT THE ELEVATOR TRIM SERVO (SERVO: PN 1C4696456). TRIM SERVO HAD BEEN REPLACED ON YEAR PRIOR WITH NO NOTED DEFECTS TO THE TRIM CABLE AT THAT TIME. STC SA1454SW EDO AIRE MITCHELL FLIGHT DIRECTOR AUTO-PILOT SYSTEM WAS INSTALLED APRIL 3, 1972. TIME ON FAILED PART IS 10,034. 1 HOURS. SUSPECT CABLE HAD INTERNAL FAILURE OF STRANDS UNABLE TO SEE WHEN INSTALLED ON SERVO. (SW15200304640)
BEECH PWA HOUSING CRACKED 01/02/2003 2702
C90A PT6* 30216018 OIL PUMP 2003020400224
OIL PRESSURE DROPPED IN FLIGHT TO BOTTOM OF GREEN ARC. TROUBLESHOOTING FOUND OIL PUMP HOUSING TO BE CRACKED.
BEECH PWA EXHAUST CRACKED 01/14/2003
C90A PT6A21 1099500001 ENGINE 2003020400151
(CAN) DURING ROUTINE INSPECTION THE ANTI ICE BOSS ON THE LT EXHAUST STACK P/N 1099500001 WAS FOUND BROKEN OFF WITH THE ANTI ICE FLEX TUBE. THE FLEX TUBE WAS ALSO CRACKED AROUND THE LOWER ELBOW.

BEECH PWA BEECH LINE COLLAPSED 01/16/2003
C90A PT6A21 130936P8D1000 DEICE SYS 2003020400160
(CAN) THE TUBING THAT SUPPLIES PNEUMATIC PRESSURE TO THE DEICER BOOTS WAS FOUND COLLAPSED. THIS TUBE IS LOCATED UNDER THE HEAT REGISTER IN THE AFT BAGGAGE COMPARTMENT. IT APPEARS THE TUBING WAS WARM AND COLLAPSED DURING THE DEICE BOOT CYCLE. THE HEATER DUCT SHOWS NO SIGN OF LEAKAGE. DAMAGED AREA IS 1 1/4 INCH LONG. REF. ' FIRE AND ICE AVIATION SAFETY, OCT2002 PG 25 'KING AIR HEATER DISABLES DEICE SYSTEM FOR TURBO PROP empennage'
BELL ALLSN BEAM ELONGATED 01/29/2003 11436
206L3 250C30P 206033210 FUSELAGE 2003020500117
NUMEROUS RIVETS WERE FOUND WORKING LOOSE IN THE BOX BEAM DURING A 100/300/ANNUAL INSPECTION. REQUIRED REPLACEMENT OF 20EACH CHERRY MAXI-BOLTS, 16 EACH CHERRY MAX RIVETS. DIGITAL PICTURES WERE TAKEN TO FURTHER DESCRIBE.
BELL ALLSN FUEL CONTROL MALFUNCTIONED 12/12/2002
206L4 250C30P ENGINE 2003020100010
(CAN) NORMAL TAKEOFF. AFTER REDUCING COLLECTIVE TO 70 PERCENT, TURBINE AND ROTOR RPM AT 105 PERCENT. BEEPED DOWN WITH NO RESPONSE, COLLECTIVE WAS LOWERED TO SLOW DOWN AND ROTOR RPM WAS NOW 115-120 PERCENT. PILOT ROLLED BACK THROTTLE TO DISENGAGE GOVERNOR, RPM REMAINED AT 115-120 PERCENT. THROTTLE WAS NOW AT FLIGHT IDLE WITH RPM AT 115-120 PERCENT. REDUCED AIRSPEED TO 60 MPH AND DESCENDED. AT APPROX. 300 FT, ENGINE SLOWED DOWN, FULL THROTTLE WAS APPLIED AND 100 PERCENT ROTOR RPM WAS REACHED & STABLE. ALL TEMPS AND RPMS WERE NORMAL, FLT WAS CONTINUED FOR 8 MINUTES BACK TO CAMP. ROTOR RPM WAS BETWEEN 115-120 PERCENT FOR 20-30 SECONDS. AFTER INSPECTING OIL LEVELS AND CHIP
BELL HOSE CHAFED 02/05/2003 3447
407 23063412 ENGINE 2003021900112
THIS HOSE DETERIORATES RAPIDLY DUE TO THE FACT THAT THE HOSE IS A CORRUGATED TUBE HOUSED IN A STEEL BRAID THAT CHAFES THE TUBE CAUSING CHAFE DAMAGE TO THE HOSE AND SUBSEQUENT OIL LEAK. THIS HOSE SHOULD BE REDESIGNED TO EXTEND RELIABILITY. THE HOSES LAST ABOUT 2 YEARS, 1,000 HOURS.
BNORM LYC FUSE CORRODED 12/23/2002
BN2B20 IO540K1B5 L56225 DC POWER DISTRIB 2003021100053
(AUS) BUSBAR UNDERVOLTAGE FUSE F86 CORRODED AND BROKEN.
BOLKMS BLADE OUT OF BALANCE 01/30/2003
BK117A3 11731743 TAIL ROTOR 2003020400090
BLADES WOULD NOT BALANCE. REPLACED WITH SERVICEABLE UNITS S/N 413 AND 414.
BOLKMS ALLSN CASE CRACKED 01/31/2003
BO105CBS 250C20B 23057142 COMPRESSOR 2003020400091
ONE 4TH STAGE COMPRESSOR STATOR VANE BROKE OFF SEVERELY DAMAGING THE 4TH & 5TH STAGE COMPRESSOR BLADES WITH SUBSEQUENT COMPRESSOR STALLING AND LOW ENGINE POWER.
BRAERO SQUAT SWITCH FAILED 01/07/2003 4274
BAE125800A 1EN114N119 MLG 2003020600104
AFTER 2 HOURS INTO FLIGHT AT A CRUISE ALTITUDE OF FL370, THE CABIN ALTITUDE SUDDENLY STARTED TO CLIMB AT A RAPID RATE. THE CABIN ALTITUDE WARNING SOUNDED, THE PAX O2 MASKS DROPPED, THE CREW IMMEDIATELY DONNED THEIR MASKS AND STARTED AN EMERGENCY DESCENT. AFTER STABILIZING BELOW 10000 FT, THE CREW NOTICED OTHER INDICATIONS THAT LED MAINTENANCE TO THE SQUAT SWITCH. UPON LANDING AT THE NEAREST AIRPORT, MAINTENANCE FOUND THE LEFT SQUAT SWITCH HAD FAILED, CAUSING THE AIRPLANE TO THINK IT WAS ON THE GROUND, AND CAUSING THE CABIN VENTURI TO TURN ON, WHICH OPENED THE OUTFLOW VALVE.
BRAERO VANE CRACKED 01/10/2003
HS125700A RT TE FLAP 2003020500207
DURING ROUTINE INSPECTION, IT WAS FOUND THAT THE RT FLAP VANE AT THE NR 2 ATTACH POINT HAD A HAIRLINE CRACK. REPAIR WAS FABRICATED AND INSTALLED IAW SRM.
BRAERO VANE CRACKED 01/10/2003
HS125700A RT TE FLAP 2003020500211
DURING ROUTINE INSPECTION, IT WAS FOUND THAT THE RT FLAP VANE AT THE NR 2 ATTACH POINT HAD A HAIRLINE CRACK. REPAIR WAS FABRICATED AND INSTALLED IAW SRM.
BRAERO GARRTT CONDUIT CORRODED 01/13/2003
HS125700A TFE731* 25PF295139A FUEL CELL 2003021900041
CORROSION CAUSES PIN HOLES, FUEL LEAKS INTO CONDUIT AND LEAKS INTO BOOST PUMP WIRES. POSSIBLE EXPLOSION OR FIRE WITH FUEL LEAKING DIRECTLY INTO WIRES. SUGGEST EMERGENCY INSPECTION OF ALL CONDUITS. IN ALL SIMILAR MAKE AND MODELS THE TUBE CORRODES FROM THE INSIDE, WHICH IS NOT PAINTED.
CESSNA CONT DOOR FRAME CRACKED 01/15/2003 19600
150L O200A 04118684 FUSELAGE 2003021300117
(CAN) DOOR POST SKIN EXTERIOR FOUND 0. 5 INCH CRACK AT THE CENTER OF THE CURVE CUTOUT AT THE FORWARD UPPER DOOR ON THE FUSELAGE.
CESSNA LYC STRAP BROKEN 07/20/2002
152 O235L2C 04265126 RT AFT FUEL TANK 2003020100132
(CAN) FUEL LEAK. RT WING. UPON REMOVAL OF THE FUEL TANK WING PANEL, DISCOVERED THE AFT FUEL TANK STRAP TO BE BROKEN. DUE TO THE BROKEN STRAP THE SCREEN ASSEMBLY HAD CHAFED THROUGH THE TOP OF THE FUEL TANK CAUSING A FUEL LEAK. FUEL TANK REPAIRED AT AN APPROVED REPAIR SHOP. NEW STRAP AND SCREEN ASSEMBLY INSTALLED CARRIED OUT FUEL TANK INSTALLATION AS PER CESSNA MAINTENANCE MANUAL AND ALL SYSTEM CHECKED SERVICEABLE AND AIRCRAFT WAS RETURNED TO SERVICE.
CESSNA LYC RIB CRACKED 12/06/2002 13957
152 O235L2C 04320016 HORIZONTAL STAB 2003020100144
(CAN) RT HORIZONTAL STAB RIB WAS FOUND CRACKED.
CESSNA LYC CARBURETOR MALFUNCTIONED 12/18/2002
152 O235L2C 105267 ENGINE 2003021400032
(CAN) ROUGH RUNNING ENGINE WAS NOTICED IN FLIGHT. PILOT THOUGHT IT WAS CARB ICE TRIED TO CLEAR IT OUT BY USING CARB HEAT. THIS DID NOT WORK, SO HE CAME BACK TO THE HANGER. AIRCRAFT WAS BROUGHT BACK INTO THE HANGER, ALL THE PLUGS WERE CLEANED. THEY WERE FULL OF LEAD, THE MAGNETO TIMING WAS CHECKED BUT IT WAS OKAY. AIRCRAFT WAS TAKEN OUTSIDE AND RAN UP, ENGINE WAS STILL RUNNING ROUGH SO IT WAS BROUGHT BACK IN AGAIN. ANOTHER CARB WAS INSTALLED AND AIRCRAFT WAS RUN UP AGAIN THIS TIME THE ENGINE RAN SMOOTH. CARB WAS SENT OUT FOR REPAIRS NOTHING OBVIOUS WAS FOUND AT THE ENGINE SHOP. ENGINE SHOP REPLACED THROTTLE SHAFT BUSHINGS. OTHER THAN THAT IT WAS IN GOOD SHAPE.
CESSNA LYC LYC CABLE WORN 01/07/2003
172K O320E2D O320E2D S17773 MIXTURE 2003021100060
(AUS) ENGINE MIXTURE CONTROL INNER CABLE WORN.

CESSNA LYC MOUNT CRACKED 01/09/2003 10164
172L O320E2D 95510171 ENGINE 2003021300113
(CAN) ONE CRACK FOUND AT ONE TOP DYNAFOCAL WELD TO TUBE, FOUR CRACKS FOUND AT CROSS TUBE BETWEEN LOWER LEGS AT WELDED AREAS. ALL CRACKS FOUND DURING DYE-PENETRANT INSPECTION CARRIED OUT IN ACCORDANCE WITH CESSNA'S CONTINUING AIRWORTHINESS PROGRAM, CAP 71-20-00. MOUNT IS OLDER STYLE, LACKING WELDED FINGER-PATCH REINFORCEMENTS FOUND ON LATER MODELS AT CROSS-TUBE WELDS. CRACKS REPAIRED AND MOUNT RETURNED TO SERVICE.
CESSNA LYC LYC BEARING FAILED 01/13/2003
172P O320D2J O320D2J SL16711 RECIPROCATING 2003021100064 887
(AUS) NO4 MAIN BEARING FAILED. BEARING MATERIAL MISSING FROM BEARING SHELL. AREA OF MISSING MATERIAL APPROXIMATELY 15MM BY 10MM(0. 59IN BY 0. 39IN). A SMALLER AREA OF BEARING MATERIAL WAS ALSO FOUND MISSING FROM NO3 MAIN BEARING SHELL. THE AREA OF BEARING MATERIAL DELAMINATED/ERODED FROM NO3 BEARING IS APPROXIMATELY 7MM BY 5MM (0. 275IN BY 0. 196IN). THE BEARING SURFACE CONTAINED CRACKS AND EVIDENCE THAT ADJOINING AREAS OF THE BEARING SURFACE WERE DISTRESSED AND WOULD FAIL IN THE NEAR FUTURE. METAL CONTAMINATION OF OIL SYSTEM.
CESSNA LYC CHECK VALVE UNSERVICEABLE 01/15/2003
172R IO360L2A VACUUM SYSTEM 2003021300061
(CAN) THE VACUUM SYSTEM CHECK VALVE MANIFOLD WAS DETERMINED TO BE UNSERVICEABLE DUE TO LEAKS PAST THE CHECK VALVE DISC. THIS FINDING WAS DETERMINED BY FOLLOWING THE INSPECTION CRITERIA CONTAINED IN CESSNA SB02-37-04. THE PART WAS REMOVED FROM SERVICE AND A REPLACEMENT PART WAS ORDERED.
CESSNA LYC CHECK VALVE UNSERVICEABLE 01/16/2003
172R IO360L2A VACUUM SYSTEM 2003021300062
(CAN) THE VACUUM SYSTEM CHECK VALVE MANIFOLD WAS DETERMINED TO BE UNSERVICEABLE DUE TO LEAKS PAST THE CHECK VALVE DISC. THIS FINDING WAS DETERMINED BY FOLLOWING THE INSPECTION CRITERIA CONTAINED IN CESSNA SB 02-37-04. THE PART WAS REMOVED FROM SERVICE AND A REPLACEMENT PART WAS ORDERED.
CESSNA LYC BUSHING UNSECURE 01/28/2003 984
172RG O360* 24900022 MLG ACTUATOR 2003021900188
DURING 100HR INSPECTION, TECHNICIAN FOUND THE LT MLG ACTUATOR CAP BUSHING. UNSEATED AND STICKING OUT OF THE ACTUATOR CAP. DURING RETRACT TEST, IT WAS FOUND THAT THE BUSHING NOW INTERFERED WITH THE BRAKE SWIVEL FITTING. THE CAP WAS REMOVED AND A NEW BUSHING WAS INSTALLED IAW SEB AND SERVICE KIT. ACCOMPLISHMENT INSTRUCTIONS 99. 9 HOURS LATER, THE SAME CONDITION WAS FOUND AGAIN, THIS TIME IN BOTH ACTUATOR CAPS. AGAIN, BOTH BUSHINGS WERE REPLACED. IT IS POSSIBLE THAT THE EC1300L ADHESIVE CALLED FOR IN SK172-151 IS NOT COMPATIBLE WITH THE GREASE OR HYDRAULIC FLUID FOUND IN THE ACTUATORS. ALL PARTS WERE THOROUGHLY CLEANED PRIOR TO INSTALLATION.
CESSNA LYC BUSHING UNSECURE 01/28/2003 1091
172RG O360* 2490022 MLG ACTUATOR 2003021900190
DURING 100 HOUR INSPECTION, TECHNICIAN FOUND RT MLG ACTUATOR CAP BUSHING, UNSEATED AND STICKING OUT OF THE ACTUATOR CAP. DURING RETRACT TEST, IT WAS FOUND THAT THE BUSHING NOW INTERFERED WITH THE BRAKE SWIVEL FITTING. THE CAP WAS REMOVED AND A NEW BUSHING WAS INSTALLED IAW MFG SEB. THE SAME CONDITION WAS FOUND AGAIN IN THE RT ACTUATOR AND THE BUSHING WAS REPLACED. IT IS POSSIBLE THAT THE EC 1300L ADHESIVE CALLED FOR IN SK172-151 IS NOT COMPATIBLE WITH THE GREASE OR HYDRAULIC FLUID FOUND IN THE ACTUATORS. ALL PARTS ARE CLEANED PRIOR TO INSTALLATION.
CESSNA LYC COMMUTATOR WORN 12/09/2002 2321
177RG IO360A1A 105932E HYD PUMP MOTOR 2003020400093
PUMP OPERATED SLOWLY. SENT FOR OVERHAUL WHICH SHOWED THAT MOTOR BRUSHES WERE WORN AND THE COMMUTATOR WAS WORN IRREGULARLY. LED TO SLOW OPERATION OF THE LANDING GEAR.
CESSNA LYC DOWNLOCK SHORTED 12/09/2002 2321
177RG IO360A1A 20700174 MLG 2003020400094
FOUND THAT RT MLG DOWNLOCK SWITCH TO BE STUCK IN THE CLOSED POSITION WHICH, WHEN COMBINED WITH THE LT MLG DOWNLOCK SWITCH OPERATING IMPROPERLY, LED TO A LANDING WHERE THE MAIN GEAR COLLAPSED WITH A GREEN DOWN AND LOCKED LIGHT.
CESSNA LYC ATTACH CRACKED 01/13/2003 9874
177RG IO360A1B6 RUDDER STOP 2003021900186
FOUND LT RUDDER STOP RIDING OVER HORN AREA. THIS CAUSED DEFLECTION OF HORN ATTACHMENT AND CRACK. STOP BOLTS NOT HITTING HORN SQUARELY, CAUSING HORN TO RIDE UP OR DOWN UNDER STOP BOLT. ASSURE STOP BOLTS HIT HORN SQUARELY.
CESSNA BULKHEAD CRACKED 01/13/2003
182Q 07126153 FUSELAGE 2003020600080
SMALL CRACK IN AFT FUSELAGE BULKHEAD AT STATION 209. ORIGINATING FROM UNDER THE RT HORIZONTAL STABILIZER UPPER ATTACH POINT.
CESSNA CONT STRUCTURE CRACKED 12/12/2002
182Q O470* RT WING 2003013100160
(AUS) RT WING COMPONENTS CRACKED. COMPONENTS AFFECTED INCLUDE: TRAILING EDGE RIB LOCATED AT STA 23. 625. WING ROOT RT RIB ASSY LOCATED AT STA 23. 625, WING SPAR REINFORCEMENT FITTING, WHEN CHANGING TRAILING EDGE RIB LOCATED AT WS 23. 625, IT WAS NOTED THAT RIVETING HAD BEEN INCORRECTLY CARRIED OUT WITH 1/8 IN RIVETS IN 5/32 IN HOLES (SOME NOT ALL). WHEN SEALER WAS REMOVED FROM THE WING ROOT AT STA 23. 625, THREE CRACKS WERE FOUND IN THE PART (RIB ASSEMBLY - WING ROOT). SUSPECT REPAIRS CARRIED OUT IN USA PRIOR TO AIRCRAFT ARRIVAL IN AUSTRALIA. PERSONNEL/MAINTENANCE ERROR. UNAPPROVED PART.
CESSNA CONT BULKHEAD CRACKED 01/13/2003
182Q O470* 07126153 FUSELAGE 2003020500067
SMALL CRACK IN AFT FUSELAGE BULKHEAD AT STATION 209. ORIGINATING FROM UNDER THE RIGHT HORIZONTAL STABILIZER UPPER ATTACH POINT.
CESSNA CONT BULKHEAD CRACKED 01/21/2003
182Q O470* 07126153 FUSELAGE 2003020500224
SMALL CRACK IN AFT BULKHEAD AT STATION 209. ORIGINATING FROM UNDER THE ATTACH POINT OF RT HORIZONTAL STABILIZER, AT THE UPPER INBOARD CORNER.
CESSNA CONT FIREWALL DAMAGED 01/02/2003
182Q O470U NACELLE/PYLON, 2003021100061
(AUS) PILOT REPORTED THAT THE RUDDER TRIM WAS NOT WORKING. INVESTIGATION FOUND DAMAGE TO THE FIREWALL AND SUPPORTING STRUCTURE.
CESSNA LYC BATTERY CORRODED 01/16/2003
182S IO540* 2020REVA ELT 2003021900034
SERIES 2000 AND 3000 BATTERY CORRODED FROM GASSING BATTERY DISCOLORED STYROFOAM CASE, ALSO CAUSED DAMAGED TO ELT PLASTIC COVER. DISCOVERED AT ANNUAL INSPECTION. SUGGEST MORE FREQUENT INSPECTION.
CESSNA PWA CESSNA SHROUD CRACKED 01/17/2003
208B PT6A114A 2652022208 26520227 OUTBOARD 2003021100080
(CAN) CRACK IN LOWER RIGHT COWLING APPROXIMATELY AT STN 50 WHERE SHROUD PN 2652022-7 OUTBOARD MEETS HAT SECTION STRINGER REPAIRED IN ACCORDANCE WITH SIRM 51-76-00 FIG 802, PAGE 803.

CESSNA SADDLE BROKEN 01/23/2003
210 12410041 MLG GEARBOX 2003020600081
COMPLIANCE WITH AD 76-14-07 R2 FOUND LT MAIN GEAR SADDLE BROKEN.
CESSNA CONT CRANKSHAFT BROKEN 01/23/2003
210 IO470E ENGINE 2003021900096
AIRCRAFT MADE EMERGENCY LANDING AFTER ENGINE FAILURE. INVESTIGATION FOUND THAT THE ENGINE CRANKSHAFT HAD BROKEN BETWEEN CYLINDERS TWO AND THREE.
CESSNA CONT TUBE CORRODED 01/03/2003
210M IO520L 12805978 LANDING GEAR 2003021100059
(AUS) LANDING GEAR ACCUMULATOR LINE CONTAINED A SMALL CORROSION PINHOLE. LOSS OF HYDRAULIC FLUID.
CESSNA CONT MCAULY CABLE FAILED 01/04/2003
210R IO520L D3A34C404 C2995120101 PROPELLER 2003021100062
(AUS) AIRCRAFT EXPERIENCED AN UNCOMMANDED INCREASE IN PROPELLER RPM AND FAILED TO RESPOND TO FURTHER COMMANDS. INVESTIGATION FOUND THAT THE STAINLESS STEEL SHAFT END OF THE PROPELLER PITCH CONTROL CABLE HAD FAILED THROUGH THE THREADS LEVEL WITH RODEND LOCATED NEAR THE PROPELLER GOVERNOR. SUSPECT INITIAL CRACKING WAS CAUSED BY PREVIOUS INCORRECT RIGGING. PERSONNEL/MAINTENANCE
CESSNA CONT BEARING SEIZED 12/27/2002
310D IO470* HSBG5S NLG 2003021900097
FORWARD ROD END BEARING (ON INTERMEDIATE ROD FROM LANDING GEAR GEARBOX TO NOSE GEAR) SEIZED, CAUSING ROD END TO SHEAR IT'S ATTACH RIVETS, ALLOWING ROD END TO PARTIALLY SEPARATE FROM ROD, EFFECTIVELY JAMMING NOSE GEAR. THIS RESULTED IN A NOSE GEAR-UP LANDING. ROD END APPARENTLY SNAPPED
CESSNA CONT MCAULY PROPELLER 12/04/2002
310R IO520M 3AF32C504C PROPELLER 2003021100081
(CAN) NUMBER 1 BLADE WAS LEAKING OIL FROM THE HUB. PROP WAS REMOVED AND SENT TO O/H SHOP. SEAL IN HUB WAS FOUND TO BE LEAKING. SEAL REPLACED -PROP WAS REINSTALLED.
CESSNA CONT BEARING RACE CRACKED 01/28/2003 3741
340CESSNA TSIO520NB 50411081 LT MLG 2003020500061 643
DURING INSPECTION IT WAS DISCOVERED THAT LT MLG WOULD NOT RETRACT. GEAR WAS DISASSEMBLED. BEARING INNER RACE WAS FOUND TO BE CRACKED.
CESSNA CONT BULKHEAD CRACKED 01/06/2003 8800
402B TSIO520* 085150047 RT WING 2003020500181
INSPECTION IAW AD, A CRACK WAS FOUND IN THE RT ENGINE CANTED BULKHEAD CAP. CRACK WAS LOCATED ON THE INBOARD SIDE OF CAP JUST INSIDE OF INBOARD WING LIP. CRACK WAS APPROXIMATELY 1. 5 INCHES AND RAN CHORD WISE WITH WING. IT WAS LOCATED IN THE AFT OF THE CAP WIDTH. UPON REMOVAL OF CANTED BULKHEAD CAP, FOUND FORWARD CANTED BULKHEAD TO BE CRACKED PERPENDICULAR TO THE CAP CRACK ON THE INBOARD SIDE IN THE BEND OF TOP FLANGE. THIS CRACK WAS ABOUT 1 INCH IN LENGTH. FOUND THAT BOTH AFT AND FORWARD BULKHEAD INBOARD SIDES HAD SEPARATED FROM INBOARD NACELLE WING RIB. FOUND THIS SAME COMBINATION ON LEFT SIDE OF THIS SAME AIRCRAFT AND ON RIGHT SIDE OF ANOTHER.
CESSNA CONT BULKHEAD CRACKED 01/06/2003 8800
402B TSIO520* 085150047 ZONE 600 2003020500184
WHILE CONDUCTING INSPECTION IAW AD 00-01-16(D)A CRACK WAS FOUND IN THE RIGHT ENGINE CANTED BULKHEAD CAP. CRACK WAS LOCATED ON THE INBOARD SIDE OF CAP JUST INSIDE OF THE INBOARD WING LIP. CRACK WAS APPROXIMATELY 1. 5 INCHES AND RAN CHORD WISE WITH THE WING. IT WAS LOCATED IN THE AFT OF THE CAP WIDTH. UPON REMOVAL OF CANTED BULKHEAD CAP I FOUND THE FORWARD CANTED BULKHEAD TO BE CRACKED PERPENDICULAR TO THE CAP CRACK ON THE INBOARD SIDE IN THE BEND OF THE TOP FLANGE. THIS CRACK WAS ABOUT 1 INCH IN LENGTH. I FOUND ALSO THAT BOTH THE AFT AND FORWARD BULKHEADS INBOARD SIDES HAD
CESSNA CONT BULKHEAD CRACKED 01/06/2003 8800
402B TSIO520* 085150047 ZONE 600 2003020500189
INSPECTION IAW AD. CRACK WAS FOUND IN RIGHT ENGINE CANTED BULKHEAD CAP. CRACK WAS LOCATED ON INBOARD SIDE OF CAP JUST INSIDE OF INBOARD WING LIP. CRACK WAS APPROXIMATELY 1. 5 INCHES AND RAN CHORD WISE WITH THE WING, IT WAS LOCATED IN THE AFT OF THE CAP WIDTH. UPON REMOVAL OF CANTED BULKHEAD CAP FOUND FORWARD CANTED BULKHEAD TO BE CRACKED PERPENDICULAR TO CAP CRACK ON INBOARD SIDE IN BEND OF TOP FLANGE. CRACK WAS ABOUT 1 INCH IN LENGTH. AFT AND FORWARD BULKHEADS INBOARD SIDES HAD SEPARATED FROM INBOARD NACELLE WING RIB. FOUND THIS SAME COMBINATION ON THE LT SIDE OF THIS SAME
CESSNA CONT SUPPORT CRACKED 12/05/2002 17944
402C TSIO520VB 50110117 SEAT 2003020100059
(CAN) INSPECTION REVEALED PILOT SEAT SUPPORT STRUCTURES CRACKED, GUSSET ASSY LT OUTBOARD, AND GUSSET ASSY LT INBOARD. INBOARD GUSSET CRACKED IN INBOARD FLANGE RADIUS ATTACHMENT TO FLOOR, OUTBOARD GUSSET CRACKED ON TOP SURFACE RUNNING THROUGH TWO ANCHOR NUTS, AND OUTBOARD RADIUS ON ATTACHMENT TO FLOOR, ILLUSTRATION REFERENCE 53-40-00, FIGURE 01.
CESSNA SKIN PANEL CRACKED 02/07/2003 8221
501 LT & RT WING 2003021900025
DURING A PHASE 1-5 DISCOVERED CRACKS IN LT AND RT WING SKIN AT AFT OUTBOARD EDGE OF WHEEL WELL CUT OUT. LT WING CRACK WAS . 50 IN. LONG RT WING CRACK WAS 0. 40 IN. LONG. REPAIRED IN ACCORDANCE WITH CESSNA REPAIR DEFINITION S-550-0264/02RD DATED NOVEMBER 14, 2000.
CESSNA SKIN CRACKED 01/15/2003
550 522277577 LT WING 2003020500217
WHILE DOING A DAILY INSPECTION A 1 3/4 INCH CRACK WAS FOUND IN THE LT WING JUST ABOVE THE INBOARD FLAP BELLCRANK. WE OPERATE A FLEET OF 26 550 SERIES AIRCRAFT WITH A LARGE PORTION HAVING A REPAIR TO THE LT OR RT WING AT ONE POINT OR ANOTHER. I HAVE FOUND SEVERAL WHILE WORKING AT A FBO. MANY OF MY FRIENDS ALSO CONFIRM THAT THIS IS A COMMON THING TO THE FLEET. TALKING TO THE FACTORY THEY WANT ONE OF THERE ENGINEERS OR A DER TO HELP IN THE FIX. IT SEAMS TO ME THAT IF THIS IS A COMMON THING THEM WHY CAN'T THE MFG. COME UP WITH A SB AND A REPAIR KIT AS WE HAVE SEEN IN THE PAST ON OTHER LESS COSTLY A/C
CESSNA PWA SKIN CRACKED 12/23/2002
550 JT15D4 55240051 LT AILERON 2003020100044
(CAN) TWO OF THE BALANCE WEIGHT ATTACHMENT SCREW HOLE HAD 1/2 INCH CRACKS STARTING FROM UNDER THE SCREW HEADS.
CESSNA PWA AILERON JAMMED 01/08/2003
560CESSNA JT15D5 6524113205 WING 2003020500201
AILERON TRIM MOVED OVER 10 DEGREES IN FLIGHT WILL JAM, PILOT WILL NOT BE ABLE TO READJUST TO ZERO.
CESSNA LYC BRACKET CRACKED 01/03/2003 4123
A152 O235* 04320049 FUSELAGE 2003020500238
DURING AN INSPECTION FOR AD (CRACKED NUT PLATES) THE BRACKET WHICH HOLDS THE NUT PLATES WAS FOUND CRACKED ON THE UPPER RIGHT HAND SIDE FROM THE CORNER RELIEF HOLE, INBOARD FOR APPROXIMATELY ONE INCH ALONG THE TOP BEND. THIS CRACK IS DIRECTLY ADJACENT TO AND JUST AFT OF THE UPPER RIGHT NUT PLATE WHICH IS ONE OF THE EIGHT NUT PLATES ADDRESSED IN THE MENTIONED AD, HOWEVER THE AD DOES NOT ADDRESS AN INSPECTION OF THE SUPPORTING STRUCTURE IN ANY MANNER.

CESSNA CONT COWLING WORN 12/31/2002
T210L TSIO520* 1213401 ENGINE 2003020400092
IT IS POSSIBLE THAT DUE TO NORMAL WEAR OF THE ENGINE COWL CAUSED CONTACT WITH THE NLG DOOR EDGE PREVENTING THE NLG FROM FULLY EXTENDING. IN ADDITION IT IS POSSIBLE THAT DUE TO THE INCORPORATION OF STC SA 5934SW, REMOVING HYDRAULIC POWER FROM THE NLG, ACTUATION PREVENTED FORCING THE DOOR ALL THE WAY OPEN WHICH WOULD ALLOW THE GEAR TO FULLY EXTEND.
CESSNA HOSE RESTRICTED 02/11/2003 2483
T210N S217840144 NLG 2003021900021
THE CESSNA 210 LANDED WITH THE NOSE LANDING GEAR STILL IN THE NOSE WHEEL WELL. UPON TROUBLESHOOTING THE NOSE GEAR HYDRAULIC SYSTEM, FOUND ONE OF THE NOSE GEAR ACTUATOR HOSES RESTRICTED AND KINKED. CESSNA SERVICE BULLETIN SEB92-8 RELATES TO THE CHANGING OF CERTAIN LANDING GEAR HOSES ON AFFECTED AIRCRAFT, WITH THIS AIRCRAFT IN THE AFFECTED SERIAL NUMBERS.
CESSNA BELLCRANK BROKEN 01/08/2003 2075
T310Q 08421022 MLG 2003020500220
THE IDLER BELLCRANK FOR THE NOSE GEAR RETRACTION LINKAGE BROKE WHEN THE LANDING GEAR WAS SELECTED TO THE UP POSITION. PILOT WAS UNABLE TO EXTEND THE NOSE GEAR. UPON LANDING THE NOSE GEAR RETRACTED INTO THE WHEEL WELL. INSPECTION REVEALED THAT THE IDLER BELLCRANK BROKE CAUSING THE NOSE GEAR TO BE DISCONNECTED FROM THE GEARBOX. SUSPECT IMPROPER RIGGING OF THE LANDING GEAR CAUSED EXCESSIVE STRESS ON BELLCRANK. MECHANICS NEED TO REMEMBER THAT DUE TO THE DESIGN OF THE LANDING GEAR SYSTEM ON TWIN ENGINE CESSNA'S, ANY ADJUSTMENTS MADE TO ANY OF THE MANY COMPONENTS OF THE LANDING GEAR EFFECTS THE ENTIRE SYSTEM, REQUIRING A COMPLETE RECHECK OF THE LANDING GEAR RIGGING.
CESSNA CONT PUMP CRACKED 12/05/2002
U206G IO520F 1U128006 VACUUM SYSTEM 2003021300115
(CAN) DURING THE SCHEDULED OPERATION NR 2 ENGINE OF THE AIRCRAFT. A CRACK WAS NOTED ON THE ENGINE ATTACH BRACKET OF THE INSTALLED VACUUM PUMP. UPON REMOVAL OF THE PUMP IT WAS DISCOVERED THAT THE ENTIRE ATTACH BRACKET WAS COMPLETELY SEPARATED FROM THE PUMP. FLIGHT CREW HAD NOT NOTED ANY FAILURE AND REPORTED THAT INSTRUMENT AIR PRESSURE WAS NORMAL WHILE IN FLIGHT. THE DAMAGED PUMP WAS REMOVED AND REPLACED WITH A SERVICEABLE UNIT.
CNDAIR GE GE FCU 01/09/2003
CL6002B19 CF343B1 6078T55P13 6078T55P13 FCU 2003021100076
(CAN) 60 MILES FROM SAVANNAH, ON DESCENT FROM FL230 TO FL110, CREW REPORTED SLOW RH ENGINE. FLAMEOUT ON DESCENT AT 330KTS AT 3200 FEET/MIN DESCENT. THE INFORMATION THAT FOLLOWS WAS TAKEN FROM AIRCRAFT DEFECT LOG BEGIN QUOTE: DEFECT: ON DESCENT RIGHT ENGINE FLAMED OUT, RIGHT ENG LOW OIL PRESSURE CAS MESSAGE DISPLAYED. ACTION: REMOVED AND REPLACED #2 FCU IAW 73-21-00. OP CK PERFORMED. NO DEFECTS NOTED. OP & LEAK CK GOOD. FUEL FILTER REPLACED, RIG CHECKED, TANKS SUMPED, NO DEFECTS NOTED.
DHAV PWA TORQUE TUBE MISREPAIRED 01/22/2003
DHC2MK1 R985AN14B C2T29A ELEVATOR 2003021400106
(CAN) PART WAS ACTUALLY REMOVED FROM STOCK FOR INSTALLATION ON A/C, BUT WOULD NOT FIT. IT WAS TAGGED AS 'USED SERVICEABLE'. IT APPEARS AS IF THE END LEVER HAD BEEN HOME MADE AND WELDED ON TO THE TUBE. ALSO PREVIOUSLY WORN ATTACHING HOLES HAD BEEN ' REPAIRED' BY THE WELDING OF WASHERS TO THE LEVERS. THE MECHANIC TRYING TO INSTALL THE UNIT REJECTED IT.
DHAV PWA ARM CORRODED 05/24/2002
DHC6100 PT6A20 AILERONS 2003021100054
(AUS) LH OUTBOARD AILERON HINGE ARM CONTAINED EXFOLIATION CORROSION AROUND BOLT HOLE.
DHAV PWA HYDRAULIC LEAKING 01/20/2003
DHC8102 PW120A 82970010401 HYDRAULIC LINE 2003021100082
(CAN) CREW REPORTED HYDRAULIC FLUID LEAKING FROM NO. 1 NACELLE. MAINTENANCE FOUND NO. 2 SYSTEM MLG DOWN PRESSURE HYDRAULIC LINE LEAKING. IPC REF 29-10-00 FIG. 20 ITEM 25.
DHAV PWA HOSE RUPTURED 12/30/2002
DHC8202 PW123D DSC252A40230 LANDING GEAR 2003021100057
(AUS) NO3 BRAKE PACK HYDRAULIC HOSE RUPTURED. LOSS OF NO2 SYSTEM HYDRAULIC FLUID.
DIAMON ROTAX ROTAX EXHAUST BROKEN 11/13/2002
DA20A1 ROTAX912S3 854116 NR 1 CYLINDER 2003021400009
(CAN) EXHAUST VALVE IN NR 1 CYLINDER BROKEN AT AREA BETWEEN STEM AND HEAD OF VALVE. VALVE DROPPED INTO COMBUSTION AREA AND CAUSED PISTON DAMAGE AND EVENTUALLY ENGINE STOPPAGE. VISIBLE WEAR ON VALVE TRAIN COMPONENTS CONSISTENT WITH IMPROPER PURGING OF LIFTERS AS ADDRESSED BY SB-912-036. NO ENTRY IN ENGINE LOG BOOK TO SHOW COMPLIANCE TO SB-912-036 OR AD-113. AD WAS RELEASED 2 MONTHS BEFORE
DIAMON LYC EXHAUST PIPE CRACKED 12/20/2002
DA40 IO360A1A ENGINE 2003020100043
(CAN) AIRCRAFT IN FOR NORMAL MAINTENANCE INSPECTION REVEALED EXHAUST PIPES CRACKED AT ALL FOUR EXHAUST FLANGES.
GIPPLD LYC SCREW LOOSE 01/16/2003
GA8 IO540K1A5 STD1339 ENGINE 2003021300091 300
(AUS) ENGINE OIL PUMP BODY 'ALLEN' SCREW LOOSE. FOUND DURING INSPECTION IAW LYCOMING SB/555.
GROB RELAY SHORTED 12/09/2002
G120A 120A9491105AV HYD SYSTEM 2003020400101
DURING PROGRESSIVE INSPECTION AND CYCLE OF THE LANDING GEAR WE HAD A FAILURE OCCURRED. FOUND A BAD HYDRAULIC CONTROL RELAY THAT SHORTED. BECAUSE OF THAT SHORT, IT ALLOW TO MUCH CURRENT TO FLOW TO PC BOARD AND SHORT OUT BOARD BETWEEN RELAYK13 PIN 13 AND 16 TO BOARD PIN 6, RECOMMEND THAT SOME TYPE OF CIRCUIT PROTECTION BE PLACED BEFORE BOARD TO PROTECT FROM POWER SPIKES. PART NEW OUT OF
GULSTM TIRE GROOVED 01/16/2003
690D MLG 2003020600083
THIS AIRCRAFT HAS CLEVELAND BRAKES INSTALLED. THE CLEARANCE BETWEEN THE TIRE SIDEWALL AND BRAKE IN MINIMAL. WHEN THE SIDEWALL FLEXES DURING LANDING IT CONTACTS THE BRAKE CAUSING A 360 DEGREE GROVE IN THE TIRE SIDEWALL. THIS DOES NOT SEEM TO OCCUR WITH OTHER TIRE MANUFACTURES, ONLY WITH GOODYEAR FLIGHT CUSTOM II.
GULSTM RROYCE ATTACH MISINSTALLED 11/30/2002
G1159 SPEY50614 WING 2003020500197
DURING ROUTINE 24-MONTH ULTRASONIC EXAMINATION NOTED ASC-426 (3 PIECE WING ATTACH FITTING) MODIFICATION WAS IMPROPERLY INSTALLED. NOTED THAT DOUBLER WAS TRIMMED TO FIT WING PLANK CUT OUT INSTEAD OF WING PIN DIAMETER. RECOMMEND ALL OPERATORS VISUALLY INSPECT FOR PROPER INSTALLATION AND

HELIO FITTING CRACKED 01/29/2003
H295 3910104001 WING 2003020500148
UPPER WING ATTACH FITTING IS CRACKED. THE CRACKS APPEAR ON THE FACE OF THE FITTINGS THAT GO AGAINST THE SPAR CARRY THRU. IN SOME CASES THE CRACKS CAN BE DETECTED INSIDE THE BARREL NUT BORE. WE HAVE BEGUN CHECKING SPARE WINGS IN STORAGE AS WELL AS FLIGHT LINE AIRCRAFT. TO DATE WE HAVE FOUND 9 CRACKED FITTINGS. TIMES IN SERVICE RANGE FROM 5087 TO OVER 16,000 HOURS. CRACKS WILL OFTEN RUN PARALLEL TO THE AXIS OF THE BARREL NUT. SOME FITTINGS EXHIBIT A CIRCULAR BRINNELED AREA WHERE THE FITTING CONTACTS THE CARRY THRU. CRACKS CAN APPEAR IN THE CIRCUMFERENCE OF THE IMPRESSION OR RADIATE IN OR OUT FROM THE CIRCUMFERENCE OF THE IMPRESSION. SOMETIMES CORROSION IS PRESENT IN THE

ISRAEL GARRTT HINGE CRACKED 01/29/2003 4550
1124 TFE731* 453005501 HORIZONTAL 2003021900032
DURING THE PERFORMANCE OF AD-89-12-08 THE LT OUTBOARD HINGE LUG WAS FOUND CRACKED. CRACK WAS VISUAL TO THE NAKED EYE, MICRO FRACTURES WERE NOTED LAST 200 HOUR INSPECTION BUT WERE NOT DEFINED.
SUGGEST THAT CAUSE COULD BE DUE TO EXCESSIVE RADIAL AND AXIAL LOADS TRANSMITTED TO THE HINGE DURING

ISRAEL GARRTT HINGE CRACKED 01/28/2003 5575
1124 TFE731* 453005501 HORIZONTAL 2003021900033
DURING THE PERFORMING OF AD 89-12-08, THE LT OUTBOARD HINGE LUG WAS FOUND CRACKED. CRACK WAS VISUAL TO THE NAKED EYE. SUGGEST THAT CRACK CAUSE DUE TO EXCESSIVE RADIAL AND AXIAL LOADS TRANSMITTED TO THE HINGE DURING THRUST REVERSE APPLICATIONS AND FLIGHT INTO TURBULENT AIR. THE RADIAL AND AXIAL LOADS CAN BE REDUCED BY ASSURING THAT THE HORIZONTAL STABILIZER SCISSORS SYSTEM IS INSPECTED EACH INSPECTION FOR SCISSORS WEAR AND SCISSORS BUSHING AND PIN WEAR.

LEAR MOUNT CRACKED 02/14/2003 5368
35A 2423100002 TIP TANK 2003021900026
DISCOVERED DURING INSPECTION FOUND A CRACK IN THE RT TIP TANK MOUNTING FLANGE. REPAIRED PER MFG.

LEAR GARRTT BENDIX DRIVE SHAFT SHEARED 01/21/2003
35LEAR TFE73122B 66082019 15872694 ON 2003021100078
(CAN) WHILE ON CRUISE, A/C LOST ELECTRICAL POWER FROM THE R/H ENGINE. A/C RETURNED TO BASE. UPON INSPECTION FOUND DRIVE SHAFT ON DC GENERATOR HAD SHEARED. DC GENERATOR REPLACED, GROUND RUN CARRIED OUT FOUND STILL UNSERVICEABLE. UPON FURTHER TROUBLESHOOTING FOUND CURRENT LIMITER HAD BLOWN. CURRENT LIMITER REPLACED.

LEAR GARRTT CLIP BACKED OUT 01/27/2003 1372
45LEAR TFE7313 C1444881 TE FLAPS 2003021900048
LEFT FLAP OUTBOARD LOWER ACTUATOR COVER PLATE FOUND DISTORTED AND BENT. UPON INVESTIGATION FOUND CIR-CLIP FOR LOWER GIMBLE PIN MISSING. THIS MISSING CLIP ALLOWED GIMBLE PIN TO DROP DOWN. WHILE PIN WAS BACKING OUT AND DURING FLAP OPERATION DAMAGED OCCURRED TO THE FLAP ACTUATOR COVER PLATE AND FLAP STRUCTURE. REPLACED POWER UNIT-FLAP DRIVE. COMPLETED REPAIR STO COVER PLATE AND FLAP STRUCTURE PER LEAR INSTRUCTIONS. SUGGEST INSPECTION FOR CIR-CLIPS AT AN INCREASED INTERVAL.

LEAR SEAT BACK BROKEN 01/21/2003 2410
60LEAR 3034242ABS CABIN 2003020600105
AIRCRAFT ARRIVED AT REPAIR STATION WITH DISCREPANCY INDICATING THAT A PASSENGER SEAT BACK WAS BROKEN. PRELIMINARY INSPECTION FOUND SEAT BACK CRACKED ALONG ENTIRE LOWER LENGTH AT THE 8 HOLES USED FOR ATTACHMENT OF UPHOLSTERY. SENT SEAT BACK TO ERDA WHO INDICATED THAT THE HOLES FOR THE UPHOLSTERY ATTACHMENT IS AN UNAUTHORIZED ALTERATION PERFORMED BY WHOEVER COVERED THE SEAT. THE HOLES ARE NOT SUPPOSED TO BE THERE. INSPECTED 3 OTHER LEARJET MODEL 60 SEATS AND FOUND THE SAME HOLES. FINDINGS WERE DISCOVERED AT JETCORP, CRS DELR158D.

LKHEED WRIGHT DOUBLER CORRODED 01/21/2003 9739
P2V7 R3350* 44305 LT & RT WING 2003020500222
FUEL INTERCONNECT ACCESS PANEL CUT OUT DOUBLER IS CRACKED AT LT AND RT PANEL NUMBERS 53L AND 53R. LT AND RT UPPER CENTER WING BOX BEAM COVERS HAVE MODERATE TO MILD CORROSION ON THE UPPER HAT SECTIONS AND THE SKIN BETWEEN WING STATIONS 84. 5 TO 192 LT AND RT. LT AND RT FORWARD UPPER SPAR CAP FROM WING STATION 84. 5 TO 192 HAS MILD TO MODERATE CORROSION. LT AND RT REAR UPPER SPAR CAP FROM WING STATION 84. 5 TO 192 HAS MILD TO MODERATE CORROSION.

LKHEED WRIGHT SPAR CAP CORRODED 01/21/2003 9739
P2V7 R3350* LT & RT WING 2003020500223
FUEL INTERCONNECT ACCESS PANEL CUT OUT DOUBLER IS CRACKED AT LT AND RT PANEL NUMBERS 53L AND 53R. LT AND RT UPPER CENTER WING BOX BEAM COVERS HAVE MODERATE TO MILD CORROSION ON THE UPPER HAT SECTIONS AND THE SKIN BETWEEN WING STATIONS 84. 5 TO 192 LT AND RT. LT AND RT FORWARD UPPER SPAR CAP FROM WING STATION 84. 5 TO 192 HAS MILD TO MODERATE CORROSION. LT AND RT REAR UPPER SPAR CAP FROM WING STATION 84. 5 TO 192 HAS MILD TO MODERATE CORROSION.

MOONEY LYC ADAPTER CORRODED 12/03/2002
M20C O360A1D 43122 FUEL CAP 2003020100018
(CAN) DURING ANNUAL INSPECTION CORROSION WAS FOUND IN THE AREA OF THE ADAPTER FOR THE FUEL FILLER CAP WHERE THE O-RING SEALS AGAINST WATER ENTERING THE FUEL TANK.

MOONEY LYC PIVOT ASSY SEIZED 07/18/2002
M20M TIO540AF1A 52002503 LT MLG 2003020400063
(CAN) THE LT MLG HAD FAILED TO EXTEND. UPON EXAMINATION IT WAS FOUND THAT THE HINGE PIVOT POINT BETWEEN THE SHOCK STRUT AND GEAR LEG SPINDLE ASSEMBLY WAS SEIZED DUE TO A LACK OF LUBRICATION. THIS CAUSED THE MLG LEG TO RETRACT IMPROPERLY AND JAMMED IN THE WHEEL WELL. EXAMINATION ALSO REVEALED A LACK OF A GREASE FITTINGS FOR THE BEARING SURFACE. LUBRICATION OF THIS PIVOT POINT WAS EFFECTIVELY IMPOSSIBLE. THE SEIZURE RESULTED IN A GEAR UP LANDING.

MUDRY LYC WING FAULTY 01/14/2003
CAP10B AEIO360B2F 5702010404800 WING, PLATES/SKI 2003021100065
(AUS) LH AILERON INBOARD FORWARD EDGE BINDING ON TRAILING EDGE OF LOWER WING SKIN. SUSPECT MANUFACTURING ERROR.

PAC CONT CONT CONTROL JAMMED 01/06/2003
CT4B IO360HB IO360HB 07401061 RECIPROCATING 2003021100058 120
(AUS) AFTER FIVE MINUTES OF AEROBATICS A LOW OIL PRESSURE INDICATION WAS NOTED. GROUND CHECK FOUND THE ENGINE OIL QUANTITY OK. ON REMOVAL OF THE AEROBATIC OIL SYSTEM VALVE ASSEMBLY BOTTOM PLUG A1/4IN UNC SCREW WITH ATTACHED LOCKWASHER WAS FOUND. SUSPECT SCREW WAS A LYCOMING ROCKER HAT SCREW. PERSONNEL/MAINTENANCE ERROR. FOD

PILATS PWA WIRE 01/17/2003
PC1245 PT6A67B WIRE 2003021100077
(CAN) WHILE REPLACING L. H. ALTIMETER, AN ARC/BURN MARK WAS NOTED ON THE EADI MOUNTING TRAY. WIRE # L52N-22 WAS FOUND TO HAVE CHAFFED THROUGH. NO PROBLEMS TO THE GPWS LIGHTING HAD BEEN REPORTED WIRE WAS REPAIRED AND LOOM RESECURED.

PILATS PWA BRAKE DISC CRACKED 01/03/2003
PC1245 PT6A67B 23203500 MLG 2003021300058
(CAN) DUE TO PREVIOUS BRAKE FAILURES WE NOW DISASSEMBLED AND INSPECT THE BRAKE ASSY. AT 900 HRS. ON INSPECTION OF THIS ASSY. WE FOUND THE INSIDE ROTOR DISK CRACKED IN 2 PLACES. WEAR PINS INDICATED BRAKE ASSY AT LESS THAN HALF LIFE. CRACKS STARTED AT RELIEF HOLE AND PROCEEDED OUTWARD.

PILATS PWA PRESSURE INTERMITTENT 01/16/2003
PC1245 PT6A67B 9738114306 MLG 2003021400006
(CAN) PILOT REPORTED GEAR WOULD NOT LOCK WHEN SELECTED DOWN THE EMERGENCY HAND PUMP WAS USED TO LOCK GEAR AND INDICATION WORKED AND LANDING WAS UNEVENTFUL. MAINTENANCE AT THE BASE DID GEAR FUNCTIONAL TEST AND IT FUNCTIONED NORMAL, THE PRESSURE SWITCH CANNON PLUG WAS CLEANED. WHEN AIRCRAFT RETURNED TO BASE THE SYSTEM WAS FUNCTIONAL TESTED AGAIN AND WATER STAINS WERE OBSERVED IN THE HYDRAULIC AREA. ALL ELECTRICAL CONNECTORS WERE CLEANED AND TREATED WITH PRODUCT RECOMMENDED BY AIRCRAFT MANUFACTURE. THE PRESSURE SWITCH WAS REMOVED AND CLEANED AND
PILATS PWA PDU FAILED 01/26/2003
PC1245 PT6A67B 952D1005 TE FLAPS 2003021400117
(CAN) FLAPS FAILED TO EXTEND ON APPROACH INTO PE. A/C LANDED AND FLAP SYSTEM INSPECTED, FLAP POWER DRIVE UNIT FOUND FAULTY PN 952D1005. UNIT REPLACED AND FLAP O SET CARRIED OUT.
PILATS PWA ACTUATOR FROZEN 01/21/2003
PC1245 PT6A67B 9787320307 TE FLAPS 2003021400118
(CAN) ON APPROACH, FLAPS WERE SELECTED AND C/B FOR FLAPS POPPED. A/C LANDED AND SYSTEM WAS RESET AND TRIED AGAIN, C/B POPPED AGAIN. UPON INVESTIGATION IT WAS FOUND THAT SEVERAL OF THE FLAP ACTUATORS WERE FROZEN. WHEN SYSTEM WAS WARMED EVERYTHING WORKED PROPERLY. ACTUATORS WERE REMOVED AND NEW ONES INSTALLED WITH IMPROVED SEALS INCORPORATED IN THEM.
PIPER LYC STRUCTURE CRACKED 08/01/2002
PA18 O320A2B 1279004 ELEVATOR 2003020100143
(CAN) LT STABILIZER REAR TUBE WAS FOUND CRACKED INBOARD OF THE OUTBOARD ELEVATOR HINGE.
PIPER LYC LINK BROKEN 12/27/2002 4298
PA23160 O360A1D 16667000 NLG 2003020400121
PILOT REPORTED HEARING A BANG WHEN GEAR RETRACTED. NO NOSE GEAR INDICATION ON GEAR EXTENSION. UPON LANDING, NOSE GEARDOWN AND LOCKED WITH GREEN LIGHT. LANDED WITHOUT INCIDENT. ON INSPECTION, FOUND HYDRAULIC ACTUATOR CONNECTOR LINKS BROKEN IN HALF WHICH ALSO RIPPED OPEN BOLT HOLES FOR LOCKING LINK. REPLACED PART, OPS CHECK GOOD. SUSPECT FATIGUE FAILURE.
PIPER LINE FAILED 08/06/2002 2774
PA23250 3153601 HYD SYSTEM 2003020400229
LANDING GEAR HYDRAULIC FLUID HARD LINE FAILED DUE TO CRACKED FLARE UNDER (B) NUT CAUSING HYDRAULIC FLUID TO BE PUMPED OVERBOARD. RIGHT MLG AND NLG FAILED TO DOWN AND LOCK WITH EMERGENCY CO2 BOTTLE DEPLOYMENT. AIRCRAFT LANDED WITH THE RT MLG AND NLG UNLOCKED. VERY HARD TO INSPECT THIS LINE DURING A ANNUAL INSPECTION DUE TO ITS LOCATION. SHOULD HAVE A HIGH PRESSURE HYDRAULIC HOSE INSTALLED IN THIS POSITION AND MANDATORY REPLACEMENT EVERY TEN YEARS.
PIPER LYC LYC HOUSING CRACKED 12/15/2002
PA23250 IO540C4B5 IO540C4B5 77852 RECIPROCATING 2003021100051 405
(AUS) ENGINE OIL FILTER HOUSING CRACKED FROM BOLT HOLE. SUSPECT CAUSED BY OVERTORQUING.
PIPER LYC TRUNNION CRACKED 01/20/2002
PA28R200 IO360C1C 6705403 NLG 2003020100141
(CAN) DURING ANNUAL INSPECTION, NOSE GEAR TRUNION FOUND CRACKED AROUND UPPER RT ATTACHMENT.
PIPER LYC SQUAT SWITCH FAILED 01/09/2003 194
PA28R201 IO360A1A 761639 MLG 2003020400095
JACKED AIRCRAFT TO VERIFY SQUAT SWITCH ADJUSTMENT IAW SRM. SQUAT SWITCH IS SUPPOSE TO ACTUATE WITHIN THE FIRST . 250 INCH OF STRUT COMPRESSION FROM FULL EXTENSION. FOUND SQUAT SWITCH TO BE ADJUSTED TO ACTUATE AT . 625 INCHES. THIS IS . 375 INCHES OUT OF LIMITS. THE TORQUE SEAL ON THE SQUAT SWITCH MOUNTING/ ADJUSTING HARDWARE SHOWS NO EVIDENCE OF BEING DISTURBED.
PIPER LYC CRANKCASE CRACKED 12/20/2002
PA31 TIO540A2C RT ENGINE 2003020100149
(CAN) WHILE CONDUCTING A DAILY INSPECTION, IT WAS NOTED THAT THE RT ENGINE NACELLE WAS FULL OF OIL. WITH THE COWLING REMOVED AN INSPECTION OF THE ENGINE WAS CARRIED OUT. A CRACK WAS FOUND ON THE RIGHT SIDE OF THE CRANKCASE AT THE FORWARD CYLINDER, LOWER FORWARD STUD (FORWARD OF CYLINDER NR 2).
PIPER LYC GOVERNOR MALFUNCTIONED 06/04/2002
PA31 TIO540J2B H210800 PROPELLER 2003020100037
(CAN) SLIGHT RPM HUNTING ON RT ENGINE AT CLIMB OUT POWER. PROP GOVERNORS WERE SWITCHED TO SEE IF PROBLEM WOULD MOVE. ENDED UP SENDING GOVERNOR OUT FOR REPAIR.
PIPER PWA BULKHEAD CRACKED 01/02/2003 17198
PA31T PT6A28 4521504 FUSELAGE 2003020400148
(CAN) DURING SCHEDULED MAINTENANCE DISCOVERED FLEXING UNDER THE DOOR SNUBBER ATTACH BRACKET WHEN OPENING AND CLOSING THE CABIN DOOR. INSPECTION REVEALED CRACKING IN BULKHEAD AND SKIN AT FS 215 REPAIRS CARRIED OUT IAW REPAIR DESIGN CERTIFICATE C-RA02-425/D.
PIPER CONT LINE CORRODED 12/24/2002
PA34200T TSIO360E 3716742 HEATER FUEL 2003020100003
(CAN) DURING A GROUND RUN FOR CALIBRATION OF AN UNRELATED SYSTEM THE ENGINEER NOTICED A STRONG FUEL SMELL IN THE CABIN. THE SOURCE WAS FOUND TO BE A CORRODED HEATER FUEL LINE AT APPROXIMATELY FS 165. THE CARPET AHEAD OF PASSENGER SEAT NR 6WAS SOAKED WITH FUEL.
PIPER PWA SHAFT SHEARED 01/23/2003
PA46500TP PT6A42 PROP GOVERNOR 2003021400025
(CAN) AT ENGINE START UP, THE PROPELLER WOULD NOT COME OUT OF FEATHER. INSPECTION REVEALED A SHEARED CONSTANT SPEED PROPELLER GOVERNOR SHAFT.
PIPER LYC CRANKCASE CRACKED 01/09/2003 9831
PA60602P TIO540U2A ENGINE 2003020500139 455
ON 28 DEC 2002, AEROSTAR N6902T LANDED AT OAJ WITH NR 2 (RT) ENGINE SHUTDOWN AND PROPELLERS FEATHERED. THE PILOT STATED THAT DURING FLIGHT, HE NOTICED A DROP IN OIL PRESSURE AND SHUTDOWN THE ENGINE. PRIOR TO SHUTDOWN, THE PILOT STATED THAT ALL OTHER INDICATIONS WERE NORMAL. UPON EXAMINATION OF THE ENGINE, A CRACK WAS FOUND BELOW THE NR 5 CYLINDER EXTENDING FORWARD TO BELOW THE NR 3 CYLINDER MIDWAY. THE LOWER PORTION OF THE CASE WERE THE NR 5 CYLINDER ATTACHED HAD SEPARATED TO THE POINT WHERE THE LOWER MOUNTING HOLES WERE VISIBLE WITH THE CYLINDER STILL ATTACHED TO THE CASE. INTERNAL DAMAGE IS EXPECTED TO BE FOUND, BUT TO DATE HAS YET TO BE
RAYTHN BEARING FAILED 02/18/2003
HAWKER800 STARTER GEN 2003021900110 695
STARTER-GENERATOR REAR BEARING FAILED. (A) STARTER-GENERATOR SINCE OVERHAUL: 695. 9 HOURS.
RAYTHN GARRTT BEARING FAILED 02/05/2003
HAWKER800 TFE731* STARTER GEN 2003021900111 695
STARTER-GENERATOR REAR BEARING FAILED. (A) STARTER-GENERATOR SINCE OVERHAUL: 695. 9 HOURS.

RAYTHN			LINE	MISROUTED	02/17/2003	
HAWKER800XP				BRAKE SYS	2003021900022	

DURING INSPECTION OF MLG (LT AND RT) DISCOVERED BRAKE LINES ROUTED INCORRECTLY CAUSING ONE BRAKE LINE TO CHAFE ON THE MAIN TIRE. SHOULD BE ROUTED IAW MAINTENANCE MANUAL 32-40-00-001. CHAFED LINES WERE

RAYTHN			WIRE	CHAFED	02/17/2003	
HAWKER800XP				ELT	2003021900023	

DURING INSPECTION WITH TAIL CONE REMOVED DISCOVERED ELT WIRING HARNESS CHAFING HARD ON AFT SIDE OF NR 2 MAIN OXYGEN BOTTLE.

RKWELL	ALIDSG		SWITCH	INOPERATIVE	01/23/2003	5320
NA26565	TFE7313AR		4014305	STABTRIM	2003020600110	

PILOT'S TRIM SWITCH BECAME INTERMITTENT AND THEN FAILED TO OPERATE COMPLETELY IN FLIGHT. CO-PILOT AND ALTERNATE TRIM SYSTEMS BOTH REMAINED FUNCTIONAL. TESTED AND REPLACED PILOT'S TRIM SWITCH AT DESTINATION. SYSTEM FUNCTIONED PROPERLY AFTER REPLACEMENT OF SWITCH.

SAAB			MOTOR	FAILED	12/01/2002	
SF340A			M3348A1	FAN	2003020400223	

FAN RETURNED TO MFG FOR OVERHAUL. WHEN FAN WAS TESTED, IT FAILED THE MINIMUM RPM REQUIREMENTS, WHEN IT WAS DISASSEMBLED, IT WAS DISCOVERED THAT THIS OVERHAULED UNIT HAS NOT BEEN OVERHAULED IAW THE MM. THE ARMATURE IS NOT OF DAE DESIGN. OVERHAUL MANUAL DOES NOT ALLOW FOR THE REWINDING OF THE ARMATURE OR THE REPLACEMENT OF PARTS OTHER THAN LISTED.

SKRSKY			BLADE	DAMAGED	01/27/2003	
S64E				MAIN ROTOR	2003021900179	

ONE OF THE TWO TRAILING EDGE STUDS THAT WAS HOLDING THE TIP END WEIGHT PACKAGE FRACTURED (TRAIL EDGE). THE FRACTURE OCCURRED APPROX. 1/4 INCH BELOW THE LOCK RING IN THE BALANCE PLATE ASSY. THIS CAUSED THE LEADING EDGE STUD TO DEFORM, ALLOWING THE WEIGHT PACKAGE TO IMPACT THE TIP CAP. THERE WERE 1. 76 LBS. SECURED ON THE TRAILING EDGE STUD. DEFORMATION WAS NOTICED ON THE TIP CAP WHEN THE AIRCRAFT WAS SHUTDOWN. THE CAP WAS REMOVED FOR REPLACEMENT, EXPOSING DAMAGE TP BOTH STUDS AND THE TIP CAP. THE WEIGHT PACKAGE WAS CONTAINED BY THE TIP CAP. THE FLIGHT CREW REPORTED NO

SNIAS	TMECA		SEAL RING	DISTORTED	01/16/2003	
AS350B2	ARRIEL1D1		0292100560	OIL FILTER ASSY	2003020600111	

ENGINE OIL PRESSURE LOSS RESULTED FROM DISTORTION OF THE DRAIN VALVE SEALING RING WITHIN THE OIL FILTER ASSEMBLY. INDENTATIONS ON THE SEALING RING CORRESPONDING TO HOLES IN THE FILTER BASE BECAME MISALIGNED DURING FILTER ELEMENT INSPECTION AND FAILED TO PRESENT A FLAT REGISTER TO THE FILTER BASE. THE INDENTATIONS MAY BE ASSOCIATED WITH OVER-TIGHTENING OF THE FILTER BOLT DURING PRIOR MAINTENANCE. THE SEALING RING IS NOT NORMALLY REPLACED DURING OIL FILTER ELEMENT INSPECTION OR

SWRNGN	GARRTT		VALVE	DEFECTIVE	01/08/2003	
SA226T	TPE331*		191003	LT TE FLAPS	2003020500064	

AIRCRAFT ROLLED LT AFTER FLAPS WERE DEPLOYED FOR 30 SECONDS, INTERMITTENTLY. FOUND LT LOCK OUT VALVE DEFECTIVE. VALVE WAS GROUND PRESSURE TESTED AND IT FAILED THE TEST. REPLACED LOCK OUT VALVE. THIS PART NEEDS TO BE PUT ON THE REQUIRED OVERHAUL SCHEDULE.

SWRNGN	GARRTT		GASKET	RUPTURED	01/30/2003	
SA226TC	TPE33110UA		8961151	NR 2 ENGINE	2003021900109	

A GASKET RUPTURED BETWEEN THE POWERPLANT AND THE BLEED AIR TUBE. THIS ALLOWED HOT BLEED AIR TO BLOW DIRECTLY ON AN ENGINE FIRE DETECTOR. THE PILOTS, FOLLOWING MFG PROCEDURES, FEATHERED THE ENGINE AND DIVERTED FOR AN UNEVENTFUL LANDING.

SWRNGN	GARRTT	ROTOL	HUB	CRACKED	12/14/2002	
SA227AC	TPE33111U	R321482F8	660709201	PROPELLER HUB SE	2003021100056	1399

(AUS) FOLLOWING PILOT REPORTS OF PROPELLER VIBRATION, AN ULTRASONIC EXAMINATION WAS CARRIED OUT ON THE PROPELLER HUB. ONE CRACK LIKE DEFECT WAS DETECTED ADJACENT TO A THREADED INSERT HOLE. THE CRACK WAS LOCATED AT A DEPTH OF 13MM (0. 512IN) AND HAD A LENGTH OF APPROXIMATELY 13MM (0. 512IN).

UROCOP			ACTUATOR	LEAKING	01/30/2003	1351
EC135P1			L673M40A1001	TAIL ROTOR	2003020400084	

LEAKING AT SPLIT LINE OF TRIANGULAR PLATE ON BOTTOM SIDE OF ACTUATOR. REPLACED WITH SERVICEABLE

ZLIN	LYC		SEAL	BLOWN	12/24/2002	
Z242L	AEIO360A1B6		5L13792	CRANKSHAFT	2003020400152	

(CAN) FRONT CRANKSHAFT SEAL BLOWN OUT DUE TO FROZEN ENGINE VENT LINE CANISTER. VENT SYSTEM PURGED AND CLEANED CRANKSHAFT SEAL RESEATED. ENGINE RUN-UP AND OIL FILTERS SERVICEABLE (NO METAL).

OMB No. 2120-0003

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

MALFUNCTION OR DEFECT REPORT

OPER. Control No.	
ATA Code	
1. A/C Reg. No.	N-

Enter pertinent data	MANUFACTURER	MODEL/SERIES	SERIAL NUMBER
2. AIRCRAFT			
3. POWERPLANT			
4. PROPELLER			

5. SPECIFIC PART *(of component)* CAUSING TROUBLE

Part Name	MFG. Model or Part No.	Serial No.	Part/Defect Location.

6. APPLIANCE/COMPONENT *(Assembly that includes part)*

Comp/Appl Name	Manufacturer	Model or Part No.	Serial Number

Part TT	Part TSO	Part Condition	7. Date Sub.

8. Comments *(Describe the malfunction or defect and the circumstances under which it occurred. State probable cause and recommendations to prevent recurrence.)*

Optional Information:

Check a box below, if this report is related to an aircraft

☐ Accident; Date _____ ☐ Incident; Date _____

DISTRICT OFFICE	OPERATOR DESIGNATOR
OTHER	
COMMUTER	
FAA	
MFG.	
AIR TAXI	
MECH.	
OPER.	
REP-STA.	

SUBMITTED BY:

TELEPHONE NUMBER ( ) –

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